

JOURNAL

OF THE

Royal
STATISTICAL SOCIETY

OF

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VOL. III.

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NOTICE.

THE Council of the Statistical Society of London wish it to be understood, that, while they consider it their duty to adopt every means within their power to test the facts inserted in this Journal, they do not hold themselves responsible for their accuracy, which must rest upon the authority of the several Contributors.

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AT the Anniversary Meeting of the STATISTICAL SOCIETY of LONDON, held on the 16th MARCH, it was unanimously RESOLVED, upon the motion of WORONZOW GREIG, Esq., F.R.S., seconded by HENRY HALLAM, Esq., F.R.S., that His Royal Highness PRINCE ALBERT OF SAXE COBOURG AND GOTHA be requested to accept the appointment of PATRON of this Society, and that the following Address be presented to His Royal Highness :—

“The STATISTICAL SOCIETY of LONDON, deeply impressed with respect for your Royal Highness’s character and station, and believing that the objects of their pursuit cannot be indifferent to one occupying the eminence on which you stand, humbly request that your Royal Highness will permit your name to be put at the head of their Society, as its PATRON.

“Placed by Providence so near the Throne of these realms, your Royal Highness will doubtless conceive the condition of the various classes of the community, the subjects of that Throne, to be a study most worthy of your attention ; and though the labours of the STATISTICAL SOCIETY, scarce yet in its sixth year, have not hitherto made very great progress, still, this is its task ;—to acquire a knowledge of facts connected with the condition of the people of all nations ; to arrange and utilize those facts ; and, studiously abstaining from what are commonly called Politics, to provide materials for the Politician, the Economist, and the Statesman.”

The Address having been accordingly presented, His Royal Highness has been graciously pleased to accept the appointment of Patron.

QUARTERLY JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

APRIL, 1840.

Sixth Annual Report of the Council of the Statistical Society of London. Session 1839-40.

THE Council of this Society, in submitting the usual account of their proceedings during the past year, feel that they can render to its interests no more valuable service than by offering at the same time a few observations upon the system which it appears to them, after a six years' experience of various methods, should guide its labours in their present stage.

These observations are the more requisite, since the diffusion of the spirit of statistical investigation in England has been exceedingly rapid during this period, while its purposes have often been mistaken. In support of the former assertion, we need only appeal to the last evidence of its truth in the statistical investigations carried out by the Town Council of Leeds, which we have more especially to bring before your notice; and in proof of the latter, we may instance the very common error that Statistics embrace all the physical sciences to which a "numerical method" is applicable. Any very accurate definition of the subject of our investigations was left unattempted by the founders of this Society, until time and labour should have furnished materials that would group themselves into classes too distinctly marked to require any such formal definition. But public speculation as to the purposes of this Society has progressed faster than the labours for their advancement. Inquiries are constantly made as to the proposed field of its labours, and the mode of pursuing them, to which the original prospectus of the Society does not afford a full answer; and indistinct ideas give rise to a discouraging impression, which it becomes our duty to endeavour at once to remove.

The first sentence of the prospectus of the Society, issued in 1834, which states that the object of its establishment is "to procure, arrange, and publish facts calculated to illustrate the condition and prospects of society," contains, perhaps, the best definition of Statistics which has yet been attempted; and, if it be imperfect, its imperfection assuredly consists in its being, not too narrow, but too comprehensive. Statistics, as thus defined, and as a branch of study worthy of our efforts, are assuredly not the mere "method" of stating the observations and experiments of the physical or other sciences, as seems, in some instances, to have been supposed. Such was not the duty assigned to this Society by its founders;—it was not to perfect the mere art of "tabulating," that it was embodied;—it was not to make us hewers and

drawers to those engaged on any edifice of physical science;—but it was that we should ourselves be the architects of a science or of sciences, the perfecters of some definite branch or branches of knowledge, which should do honour to ourselves and our country, and at the same time to the distinguished men who summoned us to the labour;—the elaborators, in fine, of truths which we feel to be necessary to our happiness, but which are yet wholly hidden from us, or but partially revealed.

Statistics, by their very name, are defined to be the observations necessary to the social or moral sciences, to the sciences of the *statist*, to whom the statesman and the legislator must resort for the principles on which to legislate and govern. These sciences are equally distinct from the purely physical, the purely mathematical, and the purely metaphysical, though the mathematical must lend aid to their pursuit.

Although the faculties and passions of men may be universally the same in kind, yet the means granted by nature for their exercise and development present every variety; therefore to estimate the condition of any people, and duly appreciate its causes, with the means of its modification, the “physical geography” of the country which they occupy forms the first indispensable body of information. It is this which determines the locality that man chooses for his habitation, and which imprints the first great characteristics of his condition. But the collecting this class of facts by no means trenches on any branch of physical science. The Statist does not undertake to pursue geology, or meteorology, or geography, or botany, or zoology, as separate and complete sciences; but selects from the facts which these elucidate, such as may bear on the welfare of the human race in our present state of knowledge; in fine, he contemplates only those facts known to science which are also cognizable by art. For his is the science of the arts of civil life; and it is only in so far as these may be influenced by the physical geography of a country that he undertakes its examination.

This first branch of investigation comprises, therefore,—geographical position;—extent;—nature of surface and hydrography;—geological structure;—soils;—climate;—and (if the country be “new,” or ill-reclaimed, and its description be made with a view to colonisation) the most remarkable features of its botany and zoology, which, in an “old” country, are comprised within the bounds of property, and the field of industry. To this class of facts belongs also a notice of those peculiarities in the physical character of the races of men inhabiting a country, which are active agents in determining their relative condition. Likewise a description of the “boundaries” of human institution, which separate one state or district from another, subdivide it for public purposes, and a knowledge of which is essential to the due arrangement of every succeeding series of facts. Since also there can be no arts of civil life without a previous recognition of rights of property in natural resources, and the products to be obtained from them, it will be here necessary to describe the existing common “rights of possession,” claimed by the citizens of each state or district; by which means we shall be made acquainted with the appropriation of the physical endowments of the country, and the basis on which the whole superstructure of its civilisation is raised.

The Statist next desires to understand the character of the productive

industry of a nation (or of whatever more limited society he may be investigating), in developing its resources, and in distributing the commodities produced. He requires to understand its industrial processes, and its whole theory of "production,"—by which term this branch of statistics may well be described. He inquires concerning its agricultural and rural economy;—the occupation of land; its tillage, crops, pastures, gardens and orchards, woods and wastes, stock, manures, implements, systems of culture, and amount of produce;—its fisheries, whether maritime or inland;—its mines and quarries;—its manufactures and handicrafts directed to producing food, clothing, habitations, and every other class of physical conveniences and luxuries;—its commerce, both internal and external, and its retail trades;—its scales of weights and measures;—its systems of currency, banking, insurance, and transit, by post, &c.;—its harbours, docks, canals and roads.

It is very common to proceed immediately from contemplating the "production" of wealth (or commodities) to regard its "consumption;" but society has other functions to exercise besides these, or its "production" would be very insignificant, and its "consumption" very insecure. Until these are examined, in fact, no just view of the distribution and consumption of wealth can be arrived at.

The class of facts, therefore, which will next demand the attention of the Statist will be those illustrating the amount and diffusion of the existing knowledge of religion, science, and letters, which might well have demanded his attention in precedence of the arts of production, since they ultimately determine the use actually made of physical resources. But art, in all the earlier stages of society, takes its own empirical course; and existing knowledge, and the institutions for its cultivation, owe so much to this previous empirical progress, that it will be found more perspicuous to give the industrial arts the precedence. Any arrangement of human affairs into great classes for the purposes of science can, indeed, be only one of convenience; for coincident in time and place they must necessarily be, since no civil society can subsist without every one of them.

In the field now contemplated—that of "instruction"—the Statist desires to know the means which are being adopted for the cultivation of the intellect, for its enrichment, and for its guidance, by feeling, habit, and principle. He will therefore inquire as to the various forms of religious belief;—the organisation of established religious institutions;—that of the several sects;—the number, constitution, &c., of universities and colleges;—of institutions for the cultivation of science, literature, and the fine arts;—the state of these;—publications;—exhibitions of works of art;—endowed, subscription, and private schools;—and domestic tuition. Such are the leading heads for collecting facts in this field; in which, again, the investigations of the Statist do not enter into the science of theology, nor into the physical, or mathematical, or metaphysical sciences, nor into that of philology; but merely contemplate the facts of the cultivation of such sciences, and the results, whether in the discovery or the diffusion of truth. It is, in fine, upon the state of religion, science, and letters, and not upon principles of religion, science, and letters, considered by themselves, that the Statist

requires information ; he himself being supposed already to possess their canons.

He will next examine into the “protection” obtained by individuals in the society, and by the whole society against the strength of others. He will collect the facts throwing light upon the nature of the constitution ;—the sovereign authority ;—the legislative chambers ;—political franchises ;—legislative processes ;—administrative departments ;—revenue and finance ;—judicial institutions ;—magistracy and police ;—municipal institutions ;—private feuds and combat ;—domestic subordination ;—punishments ;—gaols and criminals ;—diplomacy and diplomatic services ;—war and war establishments.

He will then find that there remains undescribed one vast class of facts constantly contemplated by the functions of society already noticed,—those of “consumption and enjoyment.” They will exhibit the actual condition of the whole, and of each class of the population, as resulting from the preceding data. He will obtain information as to the total number of the population, and its distribution in classes ; the total amount of wealth produced ; its distribution among these several classes, in rents, profits, wages, fees, and taxes ; and the various classes of appropriation into which those are subdivided. This will be found by far the most difficult branch of statistical investigation, since the greater portion of the facts are locked up in private affairs. The objects of expenditure can, however, be ascertained, and evidence as to the prevailing condition of any body of people may be obtained with the fullest accuracy by the classification and averaging of numerous cases, and of the phenomena which they present, as the Council have endeavoured to exhibit in the investigations made into the condition of the poorer classes in Westminster, the report upon which will immediately be laid before the Society. The numerous circumstances dependent on the aggregation or dispersion of a population, and its movements and health, as testified by vital and medical statistics,—or those of life and disease, with the influences predisposing to disease,—equally belong to this great class of facts. Habitations, food, clothing, cleanliness and economy, or their neglect ; amusements, all the objects having a direct effect upon health and enjoyment, will properly be elucidated in this section. Also institutions equalising expenditure, and securing ultimate comfort, as savings’ banks and friendly societies. Charitable institutions of every description belong to it ; together with the statistics of pauperism and pauper relief, of emigration, and of private charity, so far as it is accessible to observation.

The whole field of our labours appears thus to be divisible into the following chief sections :—

I. *The Statistics of Physical Geography, Division, and Appropriation* ; or geographical and proprietary statistics.

II. *The Statistics of Production* ; or agricultural, mining, fishing, manufacturing, and commercial statistics.

III. *The Statistics of Instruction* ; or ecclesiastical, scientific, literary, and academical statistics.

IV. *The Statistics of Protection* ; or constitutional, legal, judicial, and criminal statistics.

V. The *Statistics of Consumption and Enjoyment*; or of population, distribution, consumption, diversions, life, health, and public and private charity.

This division of the field of statistical observation is made, it will readily be perceived, according to the great purposes of mankind in society; and hence arises its chief value in affording a system of classification equally available for the most savage or the most civilised community, in any age or country, so as to present precisely the same sections of each, if the data be accessible. Another series of sections may be presented by a second classification, arising from each of these purposes being variously pursued, either privately, intersocially (or in civil intercourse), or publicly, that is, by the political organisation of a whole community to one or more especial purposes. This double classification is useful, not only for the perspicuity which it will give to our observations, but for the facility which it affords for at once selecting for immediate pursuit the branches of statistics which illustrate particular portions of moral or social science, without doubt or confusion, leaving for future and more favourable opportunities such as now present serious or insurmountable difficulties, without relaxing our efforts in the prosecution of the former.—

I. The Statistics of *Appropriation*, it divides into those,—

- 1st. Of private tenures and private property;
- 2d. Of voluntary association to hold property in common use, or to the common benefit; and,
- 3d. Of public property, or property held by the state, or the political organisation of any whole community, to the common use and advantage, against all claimants, internal or external.

II. The Statistics of *Production*, it divides into those,—

- 1st. Of “technography,” or the arts of material production as privately pursued, including private policy in the management of land and capital, and every class of services directed to supply physical wants and comforts;
- 2d. Of industrial co-operation and exchanges, being the whole of the field contemplated by political economy, excepting the consumption of wealth; and,
- 3d. Of public works, and of the influences of government upon industry and commerce.

III. The Statistics of *Instruction*, it divides into those,—

- 1st. Of private or domestic instruction, and self-instruction;
- 2d. Of instruction by common competition, and by voluntary associations; and,
- 3d. Of public instruction by endowments, and by applying a political organisation to the cultivation and diffusion of religion, science, or letters.

IV. The Statistics of *Protection*, it divides into those,—

- 1st. Of domestic organisation and discipline;
- 2d. Of the moral relationships of neighbourhood; of voluntary association for mutual protection or for arbitration; and of the remaining portions of the *lex talionis* to be found in every society; and,
- 3d. Of political constitutions; of judicial, correctional, and police

establishments and criminal laws; and of diplomatic services, war establishments, and the customs of war.

V. The Statistics of *Consumption and Enjoyment*, it divides into those,—

- 1st. Of domestic economy and manners, and private charity;
- 2d. Of social intercourse, combined amusements, mutual assurance, and voluntary association for charitable purposes; and,
- 3d. Of public amusements, or public supplies of commodities provided by political authorities; of public hospitals; and of public charity as organised by poor laws, &c.

These constitute fifteen well-defined sub-divisions of Statistics, universally available for purposes of comparison, and susceptible of the minutest sub-division, according to the multifarious detail of the affairs of life. The groups of facts collected in each may either form an historical series relating to one or more communities, or be the result of simultaneous observation in a number of communities, or in different portions of the same community.

All the departments of Statistics above described may be cultivated to the development of as many branches of moral science. By this cultivation only can we arrive at a knowledge of the physiology of societies, and comprehend the paroxysms of disease which they sometimes exhibit in a state of violence, or the exhilaration of health, which displays itself in a state of peace. Empirical treatment of symptoms, without this knowledge, must be as vain in its effects upon the body politic as upon the human frame; for it has no guide but “opinions,” under which name may be couched the wildest or the most rational notions, the truth or fallacy of which is as yet equally unsusceptible of proof from scientific data.

It will readily be granted, therefore, to have been on sufficient grounds that the first prospectus of the Society announced its intention carefully to exclude all “opinions” from its publications; not, assuredly, with the view of discouraging the proper use of *à priori* reasoning or of hypothesis, which is essential to the profitable cultivation of almost every science, but for the purpose of devoting its publications to facts, and not to systems. Hypothesis and conjecture are necessary to individuals in their pursuit of any investigation; but it is observation and experiment which decide their truth and fullness, or demonstrate their fallacy and insufficiency; and it is the results of such observation and experiment which it is the main purpose of scientific association to call forth and register. The value of hypothesis and conjecture is to point out the direction in which observation will most probably be fertile in discovering truth, demonstrating error, or striking out new paths of investigation; and it is the results of observation, thus guided, that present us with those “facts calculated to illustrate the condition and prospects of society,” which it is the purpose of this Society to “collect, arrange, and publish.” The facts must have been sought on some theory, of which they may prove the fallacy or the truth. Labourers in the field of science must, like all other labourers, have a prospect of reward; and this reward is the advancement of some definite branch of human knowledge and power. Scientific societies, however, possess no theories in their corporate capacity. They do not vote upon systems,

and decide the truth by majorities, but simply open the way for its demonstration by facts.

Experiment, in some branches of the moral sciences, is impracticable; but well-directed observation, aided by analysis, would, if pursued with vigour and judgment, lead rapidly to the elaboration of important truths. By analysis in moral investigations is meant that minute classification of actions and their results, which presents each group for separate contemplation, to the end that their relative force and amount may be accurately estimated. It is true that the relations of each group are exceedingly intimate; but not perhaps more so than the relation between the phenomena contemplated by various branches of physical science, which it is yet necessary to form into distinct groups, for the purposes of investigation. Without this process of analysis there can be no certainty as to the causes of any moral phenomenon; and daily experience presents instances of the most contradictory causes being assigned for the same phenomenon, because there exist no means by which to prove the truth or falsehood of any one assertion.

For observing the direction and results of all the actions of private life and social intercourse, abundant opportunities are presented by men's own affairs, by those of their neighbours and countrymen, and by those of the inhabitants of every other state; intelligence, integrity, and a due classification being alone requisite to render comparison and induction the means of demonstrating their true principles, and the relative advancement of societies in the knowledge and observance of them. So numerous, in fact, are the subjects of observation, that, though any individual case may not suffice to demonstrate the tendency of specific acts, where other acts may have concurred to produce any given effect, yet a recurrence of the like effect, where the conduct investigated had place, would, with a sufficient average of instances, afford the demonstration required. It is, perhaps, only the political actions of mankind which do not, at any given moment, present a sufficient variety of systems for comparison; although these, in every stage of human developement, from the first association of savage tribes, to the highest refinement of civil polity, afford materials which we might call inexhaustible, if we make our estimate from the use which has ever yet been made of them. They form at the present moment a living history, a wide contemplation of which would redeem the mind from narrow prejudices, perhaps as much as the study of the past history of our own and neighbouring countries, which can present, in its whole extent, few phenomena not strictly analogous to those which may be found at the present day in the various stages of existing civilisation, and may be studied by statistical observations in all the completeness of life, in lieu of the imperfect records of the past.

It is in the facility of analysis, to those who possess the talent, cultivation, and integrity to pursue it, that the field of moral science presents advantages for study scarcely enjoyed by some of the physical sciences, even those in which experiment can be introduced. And though to make such analysis may require more than ordinary powers, yet the mere labour of observation may often be entrusted to hands of far less skill, whose efforts are not the less meritorious, because their province is not the highest. The greatest danger of error will be in the former

process, not in the latter; and yet it is by this analytical method alone, that there is any hope of detecting moral influences before unnoticed; of subdividing the labour so as to accomplish a thorough investigation into each class of moral phenomena separately; and of assuring the inquirer that he knows not a part only, but the whole of their laws.

Although governments have almost exclusively the means of making extensive series of observations in the field of statistics, yet individual exertions, marshalled and directed by voluntary association, can accomplish much; and in the invention and proving of methods of investigation statistical societies will often bring forth plans of which governments may avail themselves with advantage; as, for instance, those on which the investigations of the Manchester and London societies have been conducted into the condition and instruction of the labouring classes. Besides thus pointing out the best modes of investigation, societies, as such, can do little for original observation. They can, in fact, do little more than suggest modes which may be adopted by governments on the one hand and by public spirited individuals on the other. Under the observation of thousands of the latter occur series of facts of the highest interest to the moral sciences, which those who even possess some leisure do not make public, either through ignorance of their value, or through doubt as to finding an available theatre for their exhibition.

The observations collected by governments are sometimes made on an immediate political emergency, and sometimes, as in the case of censuses of the population, with a view to scientific as well as to immediately practical ends; but commonly without a system contemplating the express purposes of the man of science; and they are, therefore, rough and unhewn to his hands. Still public documents form the most valuable masses of available original data, and the arranging, condensing, and publishing of such was judiciously proposed to the Society, in its first prospectus, as a task of equal utility with the collecting of new information.

It is also among the leading objects of association for scientific purposes to provide a store of existing information on the subjects under examination, and to be a centre of intelligence and encouragement for the exertions of individuals, so that labour may not be wasted in provinces already explored, nor opportunities of advancing science be neglected through apathy. Perhaps its greatest value is shown in providing an arena for the efforts of individuals, in which the meritorious will receive the rewards most gratifying to the generosity of mind which prompted their exertion. The Statistical Society presents no exception to these principles: it is upon the exertions of individuals that its utility and prosperity mainly depend; and it is to direct and encourage these, by removing doubts and difficulties, that the Council has now extended its remarks beyond the limits of a merely formal report. It remains only, in pursuance of this design, to suggest a few directions for the individual cultivation of Statistics in connexion with the Society.

The Committees into which the Council divided itself, on the first formation of the Society, accomplished but little, through attempting too much. They regarded it as their duty to advance the several branches

of Statistics which they respectively undertook, although the actual condition of those branches was not yet ascertained; and they necessarily abandoned a labour, which, even had this preliminary process been gone through, they could never have accomplished as Committees. For the future the Council would avoid the chance of such failure by advising new Committees, into which it is hoped many fellows of the Society will resolve themselves, to be guided, as sections of it, by the same principles which animate it as a whole; in other words, that they should confine their first steps to ascertaining the existing state of the several branches of Statistics which they undertake, and subsequently regard themselves rather as a centre for the exertions of their individual members, each in the field to which his peculiar opportunities and tastes may direct him, than as a corporation for the *joint* collection and reduction of new data, in which their operations must be both expensive and inefficient, except in contriving a model of system. The Council are so fully assured that much may be thus accomplished in clearing the way for new observations, by governments and by individuals, in their respective spheres, that they propose giving the utmost prudent extension to the purchase of such books as may be desired by these Committees, which, gradually accumulating under this system of selection,—the best which could be devised, had the committees no other purpose,—will form ultimately a library of circulation and reference embracing the whole field of statistical observation and moral science, and presenting a monument, the erection of which would of itself deserve the most zealous exertions. The Council, indeed, feel convinced that it would be a false economy to refrain from purchasing books of standard value for such a library; and take this opportunity of reminding the fellows that a book is kept on the table of the Society's meeting-room, in which every fellow is invited to note whatever publications he thinks would form valuable additions to it, that the Council may choose for purchase all the more valuable that shall be within their means.

That the labours of the Committees, more or less extensive as they may be, should, although they prove nothing but the existence of difficulties, be in no case lost to the Society, whose rooms and appliances will be placed at their disposal, it should be made a condition of their appointment that the chairman of each be morally responsible to the Society for a report of its proceedings, on the close of its labours, and also for a report upon the course of them at the end of every yearly session when those labours shall not be completed. These reports will exhibit to the Society the existing state of every branch of Statistics which the Committees may severally undertake to examine, and the steps next to be taken for its advancement; the preparation of them carrying its own reward in the self-instruction of the members of the committee, facilitated and encouraged by the Society. Such instruction will show them precisely the applicability of new information, of which they may possess the command, and equally awaken their own desire to reduce it to scientific form, and direct the attention of the Society to its value. Committees of this nature may advantageously be permitted to expend very small sums in special investigations, with the sanction of the Council; and, above all, the papers of each must be preserved with system and care, since they will often contain information, which,

though insufficient to deserve the express attention of the Society at large, will be of value to subsequent inquirers in the same path.

No scientific Society, in its corporate capacity, can do more. All sciences depend for their advancement upon that individual ardour in the search for truth, and delight in communicating its discovery, which, in each succeeding age, expand the realms of human knowledge and power. Association opens a career for exertion, but the victory over darkness and error must be achieved by individuals under these influences. From time to time, the Council of this Society may, as now, survey the field, and point out the best methods of action; but it must ever rely upon individual exertions for success. All or any of the various subdivisions of Statistics may be at once taken up by a greater or a smaller number of fellows; and any which it may be deemed advisable for the present to postpone, may remain until a more fitting period, without our exertions in the others being discouraged or relaxed; an advantage derivable from the previous classification of statistical investigations, which is in itself sufficient to recommend it to your careful consideration.

The Council will now turn to the principal transactions of the Society during the past year.

Their experience during this period has confirmed their opinion that the periodical publication of a journal emanating from the Society has been appreciated by the public, and has proved beneficial to the Society. It has much extended a knowledge of the operations of the Society abroad, and has increased the interest in its progress felt by a large number of members residing in the country. The Council have had occasion to know that the information contained in the Society's Journal has been frequently used in discussions in Parliament and on various public occasions, and that it is steadily advancing in popular opinion.

The contract with Messrs. Knight and Co., for its printing and publication, having expired during the past year, and those gentlemen having declined to renew it, the Council became charged with the duty of providing for its continuance. Upon a full and attentive consideration of the various means by which it might be carried on, and profiting by the experience acquired during the first year of its existence, it was determined, with the double view of diminishing the expense to the Society, and of affording more time for the preparation and selection of papers, to make it a quarterly instead of a monthly publication; each number containing half the quantity of matter formerly contained in three monthly numbers. Messrs. Clowes have undertaken to contract for the printing at a moderate rate, and the general conducting and superintendence of the publication remain in the same hands as previously. Under this arrangement, a saving of 50*l.* a-year will accrue to the Society, as the expense, after deducting the amount of copies sold to the public, calculated upon the sale of the first two quarterly parts, is not expected to exceed 250*l.* a-year.

The growing interest evinced by the legislature and by the public in the condition of the working classes, and the importance of obtaining correct information upon this difficult subject, induced the Council to devote a large sum during the past year to carry out an investigation of this nature in two large parishes in Westminster, the schools of which

had been previously examined by a Committee of the Society. The results of this inquiry, which has been extended over a population of 16,176 persons, embracing 5,366 families of the working classes, and occupied two agents for the space of more than nine months, are now ready to be laid before the Society. It was in the hope of affording exact data to those active and benevolent members of the Legislature who are engaged in endeavours to ameliorate the condition of the working classes, that the Council have been led to go beyond the bounds of their annual income; a course, which, under ordinary circumstances, they would not consider it expedient to adopt.

In the last annual report it was stated that the inquiry then in progress into the schools of Finsbury was nearly completed. It was subsequently found that a section of that borough had not been examined, and before the investigation was finished, the agent charged with the task was taken ill, and prevented for a considerable time from prosecuting his labours. It has subsequently become necessary to take the business out of his hands, and the Council have yet to find a person in whom they can place confidence to complete the inquiry. Nevertheless, they have every reason to believe that, in the course of the spring, a report, containing the results of this, their fourth, inquiry into the state of schools in London will be laid before the Society.

The Committee appointed to consider the mode of making the next Census of the population, and the nature of the information which it will be desirable and practicable to collect on that occasion, has devoted much attention to the subject, and is prepared with a report, which will appear in the forthcoming number of the *Journal*.*

The Council have already had occasion to notice the valuable report made by the Town Council of Leeds upon the social and physical condition of the inhabitants of that place, which they reprinted in the *Journal* of the Society, and of which, in compliance with a suggestion made at an ordinary meeting of the Society, they have sent a copy to each of the principal corporate towns in Great Britain. It is too soon for any result from this measure to have become manifest; but they have already reason to hope that it will be the means of inciting other municipal bodies to institute similar inquiries.

From the auditors' sheet of receipts and expenditure during the past year, which is laid upon the table, it will be seen that the balance in hand at the close of the year was 59*l.* 15*s.* 5½*d.* The outstanding liabilities of the Society, however, exceeded the sum due to the Society by 74*l.* 19*s.* 10*d.*; the amount of stock held by the Society remaining the same as at the date of the last report. This excess has been occasioned by the large sum which the Council deemed it desirable to expend upon the Committees, amounting to 235*l.*, but which expenditure it will not be necessary to continue during the present year.

Five foreign members have been elected during the past year, viz., M. Gioja of Naples, M. Mallet of Geneva, M. Duepetiaux of Brussels, M. Meidinger of Frankfort, and M. Villermé of Paris. Mr. John Capper of Ceylon has been appointed a corresponding member of the Society. The total number of Fellows at the present date is 416, exclusive of 23 foreign members, and 9 corresponding members.

* See p. 72.

A review of the progress of statistical inquiry during the past year is very satisfactory. Who would have imagined ten years ago that any municipal authorities would have undertaken the task of thoroughly investigating the condition of the population over whom they were placed, or that, if they had ventured upon such a step, popular opinion would have enabled them to complete it, and to make public the results? It is also gratifying to find that those, in whose hands lies the greatest power for introducing practical ameliorations in the social condition of the people, are giving increased attention to the subject. The motions of the Bishop of London and the Marquis of Westminster in the House of Lords, and of Mr. Slaney in the House of Commons, for inquiring into the circumstances affecting the health and comfort of the working classes, bear evidence to the increasing desire for exact information upon the condition of these classes, and to the sympathy in their wel-

STATISTICAL SOCIETY OF LONDON.—Abstract of Receipts

RECEIPTS.				£. s. d.	£. s. d.
1839.	Balance in the hands of the Treasurer and Secretaries	.	.	.	90 5 3
Jan. 1.	Cash received for arrears of subscriptions for 1835	.	2	2 0	
	" " 1836	.	6	6 0	
	" " 1837	.	21	0 0	
	" " 1838	.	50	8 0	
					79 16 0
	" for subscriptions for 1839	.	.	.	67 4 0
	" " 1840	.	.	.	4 4 0
	" for compositions	.	.	.	60 18 0
ASSETS, December 31, 1839:—				Total . . .	909 7 3
	Stock in Reduced 34 per Cents.	569 17 0	cost	567 0 0	
	" Consols 3 per Cents.	328 15 4	"	300 0 0	
	" Cash balance	.	.	59 15 54	
					926 15 54
DUE to the Society, December 31, 1839:—					
	Dividend on stock	.	.	.	29 16 0
	From Messrs. Knight, for sale of Journal	.	.	.	28 1 9
	From subscribers to the reprinted volume of Proceedings	.	.	.	15 15 0
	From members in arrears of annual subscriptions:—				
	1834 .. 1 ..		2	2 0	
	1835 .. 7 ..		14	14 0	
	1836 .. 14 ..		29	8 0	
	1837 .. 23 ..		48	6 0	
	1838 .. 28 ..		58	16 0	
	1839 .. 65 ..		136	10 0	
			289	16 0	
	Deduct amount of those not likely to be paid	.	132	6 0	
					157 10 0
Total due to the Society				£	231 2 9

fare entertained by the more wealthy section of their countrymen. The reports of the Hand-Loom Inquiry Commission, and those of the Poor Law Commission, as to the sanatory condition of the working classes in large towns, throw important light upon this subject. Nor must the valuable Report of the Registrar-General of Births, Marriages, and Deaths, whose labours are about to create a new era in the branch of vital statistics, and the improved Bills of Mortality for London, be here overlooked.

These, and other minor, but collectively important, evidences of the progress of statistical inquiry in England, must afford great gratification to its friends and cultivators; and the Council deem that the Society may, without arrogance, claim some credit for promoting and invigorating the spirit in which this progress has taken its rise.

and Expenditure, from the 1st Jan. to 31st Dec. 1839.

EXPENDITURE.

	£. s. d.	£. s. d.	
Cash paid for rent (four quarters)		165 0 0	1839.
Salaries, Assistant Secretary and Messenger, each four quarters		190 0 0	Dec. 31.
Per centage to Collector for 1838	25 17 4		
" " 1839	10 0 0		
		35 17 4	
Expenses of housekeeping and ordinary meetings, including payments and gratuity to housekeeper		43 9 5	
Grants to the Committee on Education in the Metropolis		75 0 0	
" " The Working Classes		155 0 0	
" " Vital Statistics		5 0 0	
Stationery		10 18 8	
Books		7 16 6	
Postages, parcels, and portorage		14 16 8	
Messrs. Knight for Journal 2 quarters, including 1 for 1838.	150 0 0		
Editor of Journal, 2 quarters	37 10 0		
Advertising the Journal	9 1 0		
		196 11 0	
Miscellaneous, including a subscription returned		10 2 2½	
Balance in the hands of the Treasurer	58 10 11½		
" " Secretaries	1 4 6		
		59 15 5½	
Total		909 7 3	

LIABILITIES of the Society, December 31, 1839:—

To Messrs. Clowes for printing the Journal, three quarters of 1839	165 0 0	
Reprinting Proceedings, and miscellaneous printing	78 17 6	
		243 17 6
Editor of the Journal, one quarter		18 15 0
Clark for Stationery		6 6 7
Parker for Coals		7 15 0
Hansard for Parliamentary Papers		5 11 9
Collector for per centage		16 4 0
Horne for Mark Lane Express		3 5 9
Hooper for Penny Cyclopædia		1 6 6
Bailière for French books		1 16 6
Blackwood for Statistical Account of Scotland		1 4 0
Total owing by the Society	£	306 2 7

Signed { WOROZOW GREGG.
WILLIAM A. GUY.
JAMES WILKINSON.

Report of a Committee of the Statistical Society of London, on the State of the Working Classes in the Parishes of St. Margaret and St. John, Westminster.

[Read at an Ordinary Meeting of the Society, March 16th, 1840.]

IN presenting the following Report to the Statistical Society of London, the Committee, who have conducted the inquiry, are desirous of stating that it has been their object to investigate the condition of the whole of the families of the working classes resident within the parishes of St. Margaret and St. John, Westminster.

Having prepared a series of questions relating to the physical and moral condition of the working classes, the Committee appointed two agents, in whose integrity and diligence they could rely, and confided to them the duty of obtaining answers to their queries, by a personal inspection of the dwellings of the working classes, and by conversation with the members of the families of the working population, whom they might find at home during their visits. Both the agents visited the dwellings of the working classes together, and they thus became mutually a check on the accuracy of the statistical information obtained. For a short time a third agent was engaged by the Committee to assist in the investigation, by visiting alone, but at the end of a few weeks he relinquished his employment, and the whole of the work of the inquiry was subsequently conducted by the two agents who had been originally appointed.

Many of the houses in the district visited were subdivided into single rooms, and each room contained frequently a separate family; the street door leading to the interior apartments was usually closed, and the agents were often obliged to knock or ring in order to obtain admission into the house; they afterwards visited the various families within the house in their separate apartments.

Nearly two-fifths of the houses in the district examined were inhabited by the families of the working classes, and were therefore included within the objects of the inquiry.

During their visits to these houses the agents met with almost constant courtesy from the members of the families visited, who were in many instances the wives or mothers of workmen employed in the neighbourhood. There were 16,176 persons included within the inquiry, and 1·71 per cent., or less than one-fiftieth part of this number were found to be confined to their rooms by sickness. According to the census of 1831, the total population of the parishes of St. Margaret and St. John, Westminster, amounted, at that period, to 47,922 inhabitants.

Lodgers of the working classes, in the two parishes visited, usually rented unfurnished rooms, and they afterwards provided themselves with beds, chairs, and other household furniture. A security for the punctual payment of the rent was thus afforded to the landlords, in the value of the furniture purchased by the tenants.

Whole families were often congregated together in rooms of small dimensions, and the ventilation of the rooms was, in many cases, very imperfect. No instance occurred of more than one family residing in the same room. Rooms were considered to be well furnished when they contained a bed, several chairs, a piece of matting, a table, a clock, and a

cupboard or a chest of drawers; scantily furnished rooms contained a bed, two chairs, a chest of drawers, and a table; ill furnished rooms contained only a bed, one chair, and a table, and sometimes one or other even of these essential articles of furniture was wanting. Two-fifths of the dwellings visited were, according to these definitions, well furnished; two-fifths were scantily furnished, and one-seventh were ill furnished, or, in some instances, nearly destitute.

At the commencement of the inquiry the number of beds was observed in a portion of the parish of St. Margaret, including Orchard-street and Tothill-street, in which streets many poor families reside. For 275 families visited in this locality, it was found that there were 389 beds provided; the total number of the members of the 275 families consisted of the following individuals:—

221	adult males,
257	adult females,
14	aged males,
20	aged females,
287	male children,
313	female children,

Total, 1112 persons; affording thus an average of nearly three
 ————— persons, of both sexes, and of all ages, to each
 bed.

Pictures were commonly seen in the dwellings visited, but the number of theatrical or amatory pictures exceeded the number on serious subjects.

The most popular literature which was read in the families of the working classes visited, consisted of the cheap periodical publications of the day; and the most adventurous, and unfortunately often the most licentious of these economical papers, were more attractive than the serious and really useful works of the periodical press. Serious books, however, slightly preponderated in number over the theatrical or amatory books.

More than half of the total number of children were reported to be in attendance at school. Dame schools were included with day schools, Sunday schools, and infant schools, in the places of education for the children, and a majority of the children were stated to be in the receipt of gratuitous education, which large number is probably owing to the existence of several free schools in the district visited, and to the Sunday schools.

The number of the members of the Church of England among the families of the working classes visited was slightly greater than the collective number of the Roman Catholics and Dissenters. Nearly one-fifth of the principal members of the families of the working population visited, professed not to belong to any religious denomination whatever. About two-fifths of the principal members of the labouring families visited stated that they attended public worship, and nearly the same number stated that they did not attend public worship.

Many of the working men were employed as labourers during the week, or they were engaged in the numerous manufacturing establishments which are met with in the metropolis. The women were generally not employed from home; nearly two-fifths were, however, in work, and were occupied in washing, domestic service, or needlework, or as hawkers.

Families of the working classes usually preferred living in their own separate rooms, for the sake of economy; but there were a few cases in which several individuals, not belonging to the same family, were collected together in the same room.

One lodging-house in Orchard-street, in the parish of St. Margaret, was divided into rooms for nightly lodgers, as well as for families. Six rooms were set apart in this house for the nightly lodgers, and each room was furnished with four beds, thus affording accommodation for 24 lodgers, at 3*d.* per night for each bed. Some of the inmates were, however, too poor to pay even so small a sum as 3*d.* for their bed, and the same bed was, in consequence, occasionally shared by several occupants. The beds were of straw, with threadbare and ragged coverings, and each room was only provided with a couple of chairs. Five rooms in the same house were in the possession of weekly tenants; two of these rooms were rented by one family, at the rate of six shillings per week, and each of the remaining lodging-rooms was occupied by a separate family, at the rent of 3*s.* 6*d.* per week. If the beds were regularly occupied, and paid for, and the weekly rents of the other rooms were punctually paid, the income arising from the sub-division of this house would be thus received:—

	£.	s.	d.
24 beds, at 3 <i>d.</i> per night, for one year	109	10	0
2 rooms, at a weekly rent of 6 <i>s.</i>	15	12	0
3 rooms, at 3 <i>s.</i> 6 <i>d.</i> each, or 10 <i>s.</i> 6 <i>d.</i> for the 3 rooms, per week .	27	6	0
	£152	8	0
<hr/>			
The yearly rent paid by the landlord for the house, including the taxes, was stated to be	60	0	0
			<hr/>
Difference	£92	8	0

There can be little doubt but that the profits arising from such a sub-division of household property must be very considerable.

On the ground floor of this lodging-house there is an eating-room, in which the lodgers frequently take their meals. Twenty-four individuals, including eighteen males and six females, were observed at the same time in this room, which was not more than twenty feet square. A couple of benches, about half a dozen chairs, and a table, were placed in the eating-room, for the benefit of the lodgers; some of the men were smoking and drinking, and others were engaged either in preparing or in eagerly devouring their breakfast, amidst much noise and confusion.

A large tract of ground, on the eastern side of the Bridewell, in the parish of St. Margaret, Westminster, still remains undrained, and is liable alike to floods in winter, and to the hurtful exhalations of its stagnant waters in summer. Several rows of cottages have been built in different directions, and without uniformity, across this territory, and the general name of Palmer's Village is given to the locality, from a tradition of its ancient inhabitants. Rents are usually low in this vicinity, and no rents are paid for many of the cottages. The neighbours state, that six or eight of these cottages, opposite to Paradise-row, in Palmer's Village, were formerly in the possession of a Mr. Andrew Mann, and that some years ago they were the subject of a law-suit, which was decided against Mann. Instructions were then given, by the agent of

the opposite party, to the tenants, not to pay any rent until they were called upon again for that purpose, which has not yet been done. Since the decision of the law-suit, no change of tenants has occurred, and one house, which became empty, was immediately locked up, as it now remains; it is in a most dilapidated condition, with the windows and roof in holes.

Most of the cottages in Palmer's Village are small, containing only two rooms each, the dimensions of which do not average more than eight feet square. Only one family is contained in each cottage. The windows in some of the cottages are mended with paper and other thrifty substitutes for glass. Although these habitations are evidently in want of repair, and may even be dangerous, from their time-shaken and tottering condition during the period of storms, the inmates are attached to them, as they are thus enabled to escape from the exactions of extravagant rents.

The analysis of the number of the dwellings of the working classes, in the parishes of St. Margaret and St. John, Westminster, presents the following results:—

3,852	single rooms for each family.
1,053	sets of two rooms for each family.
156	sets of three rooms for each family.
52	sets of four rooms for each family.

Total, 5,113 dwellings of families visited.

If the dwellings of the nightly lodgers be also included, there will be about 5,294 dwellings in the district visited, in the greater part of which the sum paid as rent was carefully ascertained from the inmates.

The average amount of weekly rent paid on these 5,294 dwellings amounts to 2s. 11¼d., and more than three-quarters of the dwellings are only single rooms.

Some idea of the expensive terms on which labouring families are generally compelled to rent their small and inconvenient dwellings in the district visited may be derived from a comparison of the dwellings of the working classes in Manchester, as they are classified in the published tables of the Manchester Statistical Society.

According to the analysis of the dwellings of the working classes visited by the agents of that society, there are in Manchester—

21,453	houses, inhabited by the working population.
3,162	single rooms.
3,571	cellars.

Total, 28,186 dwellings, of which three-quarters are whole houses or cottages, not limited to single rooms.

The average weekly rent of these dwellings is 2s. 11¼d.

The exorbitant rates which were often charged for the lodgings of the working population in Westminster constituted the source of numerous and bitter complaints which were made to the agents of the Committee during their visits to the dwellings of the poor; and the amelioration of their condition can hardly be anticipated, while they are obliged to pay very high rents.

It is not, however, meant, by any remark which may be made in this

Report, to attach blame to the parties by whom the rents are received. These parties only seek for that gain which every one who embarks his property in a business considers to be his due; and the extent of their profits is of course limited by the same law which limits and regulates profits generally,—the law of demand and supply.

High rents are an evil of a practical nature, from which the labouring classes in Westminster are severely suffering; and a sufficient proof of this circumstance is afforded in the fact, that large numbers of the families of the working population continue to reside, for months and years together, crowded within miserable dwellings, consisting of single rooms, of very moderate size, for each family.

As a remedy for such an obvious grievance, the Committee are desirous to show the advantage which may be derived from the outlay of a moderate amount of capital in the erection of buildings, containing sets of rooms suited to the accommodation of labouring families, in properly selected situations. For these dwellings weekly rents should be required from the tenants, and a profit may in this manner be reasonably expected from capital judiciously invested, while advantages of still greater importance, both physical and moral, would be gained to society, from the removal of a serious cause of discontent among the working classes, and from the provision of a more correct and convenient arrangement of their household comforts, which may materially assist in the foundation of a superior moral character for the working population of the city of Westminster.

TABLE 1.—Population and State of Health of the Families of the Working Classes in the Parishes of St. Margaret and St. John, Westminster.

	St. Marg.	St. John.	Total.
Number of families visited	2,110	3,256	5,366
Male children . . . {Well	1,438	1,893	3,331
{Ill	27	41	68
Female children . . . {Well	1,173	1,552	2,725
{Ill	18	21	39
Total	2,656	3,507	6,163
Adult males {Well	1,757	3,066	4,823
{Ill	16	59	75
Adult females . . . {Well	1,964	2,798	4,762
{Ill	8	68	76
Aged and infirm males {Well	31	90	121
{Ill	3	9	12
Aged and infirm females {Well	28	109	137
{Ill . . . . .	..	7	7
Total	3,807	6,206	10,013
Number of children . . .	2,656	3,507	6,163
Total population	6,463	9,713	16,176
Total ill	72	205	277
Number of children vaccinated	1,742	1,972	3,714
,, not vaccinated	914	1,535	2,449

TABLE 2.—Occupation of the Principal Members of the Families.

	St. Marg.	St. John.	Total.
Men employed in building trades . . .	144	287	431
„ clothing trades . . .	236	167	403
„ as labourers . . .	473	1,245	1,718
Occupations not classified . . .	803	1,080	1,883
Not employed . . .	79	34	113
Not ascertained . . .	72	411	483
Total . . .	1,807	3,224	5,031
Women employed in domestic service .	391	538	929
„ needlework . . .	207	213	420
„ hawkers . . .	80	184	264
Not employed . . .	1,322	2,047	3,369
Total . . .	2,000	2,982	4,982

TABLE 3.—Country of the Principal Members of the Families.

	St. Marg.	St. John.	Total.
London . . .	653	777	1,430
Other parts of England . . .	1,155	1,469	2,624
Ireland . . .	99	499	598
Scotland . . .	59	133	192
Wales . . .	16	90	106
Foreign countries . . .	2	20	22
Not ascertained . . .	126	268	394
Total . . .	2,110	3,256	5,366

TABLE 4.—Religion professed by the Principal Members of the Families.

	St. Marg.	St. John.	Total.
Members of families professing—			
To be members of the Church of			
England . . .	769	1,068	1,837
„ Roman Catholics . . .	95	486	581
„ Methodists . . .	106	135	242
„ members of other religious			
denominations . . .	438	505	943
Not to belong to any religious deno-			
mination . . .	541	640	1,181
Number not ascertained . . .	161	421	582
Total . . .	2,110	3,256	5,366
Number of the members of families who			
state that they—			
Attend public worship . . .	956	1,333	2,289
Do not attend public worship . .	912	1,165	2,077
Not ascertained . . .	242	758	1,000
Total . . .	2,110	3,256	5,366

TABLE 5.—Attendance of the Children of the Working Classes at Schools.

	St. Margaret.			St. John.			Total.
	Males	Fem.	Total.	Males	Fem.	Total.	
Number of children attending—							
Dance and day-schools	464	469	933	513	409	922	1,855
Sunday schools	261	262	523	267	321	588	1,111
Infant schools	179	239	418	153	160	318	736
Number attending school	904	970	1,874	938	890	1,828	3,702
Number of children not attending school—							
Males	561	..	..	996	..	..	1,557
Females . . . . .	..	221	..	..	683	..	904
Number not attending school . .	..	..	782	..	..	1,679	2,461
Total . . . . .	..	..	2,656	..	..	3,507	6,163

TABLE 6.—Payments of the Children of the Working Classes attending School.

Rate of Weekly Payment.	St. Marg.	St. John.	Total.
1 <i>d.</i> and not exceeding 3 <i>d.</i> . .	404	385	789
Exceeding 3 <i>d.</i> and not exceeding 6 <i>d.</i> . .	357	295	652
„ 6 <i>d.</i> „ 9 <i>d.</i>	28	15	43
„ 9 <i>d.</i> „ 1 <i>s.</i> 0 <i>d.</i>	34	17	51
„ 1 <i>s.</i> 0 <i>d.</i> „ 1 <i>s.</i> 3 <i>d.</i>	4	4	8
„ 1 <i>s.</i> 3 <i>d.</i> „ 1 <i>s.</i> 6 <i>d.</i> . . . . .	..	4	4
„ 1 <i>s.</i> 6 <i>d.</i> „ 2 <i>s.</i> 0 <i>d.</i> . . . . .	..	2	2
Total	827	722	1,549
Not paying any sum for schooling . .	1,047	1,106	2,153
Total	1,874	1,828	3,702

TABLE 7.—General Account of Books found in the Dwellings of the Working Classes.

Description.	St. Margaret.	St. John.	Total.
Serious	275	387	662
Theatrical and Amatory	267	337	604
Miscellaneous	840	1,077	1,917
Rooms without any	679	1,251	1,930
Total	2,061	3,052	5,113

TABLE 8.—General Account of Pictures found in the Dwellings of the Working Classes.

Description.	St. Margaret.	St. John.	Total.
Serious	171	166	337
Theatrical and Amatory	562	353	925
Miscellaneous	1,021	1,890	2,911
Rooms without any	307	633	940
Total	2,061	3,052	5,113

TABLE 9.—Rents paid by the Working Classes for their Dwellings.

	No. of Families.			Annual Amount of Rent.		
	St. Margaret.	St. John.	Total.	St. Margaret.	St. John.	Total.
Paying a weekly rent of 1s. and under	2	68	70	£. 4	£. 133	£. 137
Do. exceeding 1s. and not exceeding 1s. 6d. }	14	89	103	45	259	334
,, 1s. 6d. , 2 0	113	336	449	504	1,529	2,033
,, 2 0 , 2 6	591	703	1,294	3,457	4,113	7,570
,, 2 6 , 3 0	213	479	692	1,523	3,425	4,948
,, 3 0 , 3 6	399	290	689	3,890	2,450	6,340
,, 3 6 , 4 0	97	205	302	946	1,999	2,945
,, 4 0 , 4 6	130	217	347	1,436	2,398	3,834
,, 4 6 , 5 0	41	166	207	506	2,050	2,556
,, 5 0 , 5 6	67	95	162	915	1,297	2,212
,, 5 6 , 6 0	9	45	51	135	673	808
,, 6 0 , 6 6	12	47	89	687	764	1,451
,, 6 6 , 7 0	..	12	12	..	211	211
,, 7 0 , 8 0	1	35	36	21	751	772
Nightly lodgers at 3d. per night .	..	126	126	..	575	575
,, 4d. ,	..	109	109	..	663	663
Rent not ascertained	319	234	553	1,866	1,369	3,235
Paying no rent, Palmer's village .	72	..	72	..	..	..
Total	2,110	3,256	5,366	15,935	24,689	40,624
2,038 Dwellings in St. Margaret's, at an average weekly rent of 3s., give annually }				£ 15,896		
3,256 ,, St. John's, ,, 2s. 11d. ,, . . .					£ 24,684	
5,294 ,, 2s. 11½d. ,, . . .						£ 40,432

In estimating the annual amount of rent, an average weekly rent of 9d. has been taken for the first line; 1s. 3d. for the second; 1s. 9d. for the third, and so on; an addition of 6d. being made at every step. These rates form a mean between the two extremes. Where the rent has not been ascertained, the average of the rest has been taken.

TABLE 10.—Streets, Alleys, and Courts, in the Parishes of St. Margaret and St. John, Westminster.

	St. Margaret.	St. John.	Total.
Number of streets, alleys, and courts, } which are thoroughfares }	120	95	215
Not thoroughfares	63	64	132
Total	188	159	347

TABLE 11.—Number of the Dwellings of the Families of the Working Classes visited.

	St. Margaret.	St. John.	Total.
Single rooms for each family	1,601	2,251	3,852
Two " " 	417	636	1,053
Three " " 	38	118	156
Four " " 	5	47	52
Total number of dwellings visited	2,061	3,052	5,113

TABLE 12.—Condition of the Dwellings of the Working Classes visited.

	St. Marg.	St. John.	Total.
Number of dwellings well furnished . .	1,085	1,091	2,176
" scantily furnished . .	908	1,275	2,183
" ill furnished . .	48	674	722
" not ascertained . .	20	12	32
Total	2,061	3,052	5,113
Number of dwellings dry	2,035	2,643	4,678
" damp	20	256	276
" not ascertained . .	6	153	159
Total	2,061	3,052	5,113

TABLE 13.—State of the Supply of Water in the Dwellings of the Working Classes visited.

Supply of Water.	St. Marg.	St. John.	Total.
Plentiful	2,004	2,820	4,824
Scanty	53	49	102
Not ascertained	4	153	157
Total	2,061	3,052	5,113
Good	2,011	2,863	4,874
Bad	1	..	1
Not ascertained	49	159	238
Total	2,061	3,052	5,113

TABLE 14.—Average Dimensions of the Rooms in the Dwellings of the Families of the Working Classes visited.

Number of dwellings in which the average dimensions of the principal rooms occupied by the families are—	St. Margaret.	St. John.	Total.
8 feet by 10	360	87	447
10 „ by 12	484	623	1,107
12 „ by 14	899	1,641	2,540
14 „ by 18	316	652	968
18 „ by 24 . . . . .	..	3	3
Not ascertained	2	46	48
Total	2,061	3,052	5,113

TABLE 15.—State of the Drains and Pipes in the Dwellings of the Working Classes visited.

	St. Marg.	St. John.	Total.
In good order	1,834	2,582	4,416
Out of order	143	148	291
Not ascertained	84	322	406
Total	2,061	3,052	5,113

TABLE 16.—State of the Privies belonging to the Families of the Working Classes visited.

	St. Marg.	St. John.	Total.
Number of privies which are decent	710	701	1,411
„ „ „ not decent	235	340	575
Total number of privies	945	1,041	1,986
Number of families in which each family has one } privy	208	41	249
Two families have one privy	536	645	1,181
Three „ „	432	751	1,183
Four „ „	422	437	859
Five „ „	219	566	785
Six „ „	24	32	56
Seven „ „	45	21	66
Eight „ „	24	366	390
Nine „ „	19	9	28
Ten „ „	20	56	76
Eleven „ „	22	12	34
Twelve „ „	12	70	82
Thirteen „ „	39	..	39
Fifteen „ „	36	18	54
Sixteen „ „	16	132	148
Eighteen „ „	36	18	54
Twenty „ „ . . . . .	..	82	82
Total number of families	2,110	3,256	5,366

As a general average, there are two families to one privy in the houses visited in the parish of St. Margaret; three families to one privy in the houses visited in the parish of St. John; and nearly three families to one privy in the whole of the district examined by the agents.

TABLE 17.—Length of Time, which the principal Members of the Families of the Working Classes visited state that they have resided in their Dwellings.

Period.	St. Margaret.	St. John.	Total.
From 1 month to 6 months	604	1,230	1,834
„ 6 „ to 1 year	205	316	521
„ 1 year to 3 „	360	676	1,036
„ 3 „ to 6 „	602	389	991
„ 6 „ to 9 „	126	97	223
„ 9 „ to 12 „	60	48	108
„ 12 „ to 15 „	9	17	26
„ 15 „ to 20 „	4	18	22
„ 20 „ to 40 „	2	11	13
Not ascertained	138	454	592
Total	2,110	3,256	5,366

TABLE 18.—General Summary of Houses in the Parishes of St. Margaret and St. John, Westminster.

Description.	St. Marg.	St. John.	Total.
Private houses	1,447	2,011	3,458
Houses untenanted	86	105	191
Beer shops	19	21	40
Spirit shops and public houses	76	52	128
Dispensaries and asylums	6	2	8
Churches	2	1	3
Chapels	6	5	11
Almshouses	24	12	36
Friendly Loan Societies	5	1	6
Institution, Literary and Scientific . . . . .	..	1	1
Schools observed	38	29	67
Surgeons and dentists	12	7	19
Chemists and druggists	17	15	32
Shops—clothing	186	113	299
„ food	261	172	433
„ furniture	64	24	88
„ tools, machines, and fittings	9	2	11
„ pawnbrokers	8	11	19
Other trades	351	303	654
Disorderly houses observed	50	28	78
Total number of houses included in the parishes of St. Margaret and St. John, Westminster	2,667	2,915	5,582
Total number of houses visited, as inhabited by the working classes, in these two parishes	1,013	1,256	2,269
Number of houses not visited, as not inhabited by the working classes, in these two parishes	1,654	1,659	3,313
Total	2,667	2,915	5,582

Report on the State of Education in Birmingham. By the Birmingham Statistical Society for the Improvement of Education.

THE inquiry into the state of education in Birmingham, of which the results are exhibited in the annexed tables, emanated from, and was prosecuted under the direction of, the Birmingham Statistical Society for the Promotion of Education. The visitation of the schools was commenced in January, and terminated in April, 1838. Every means was adopted to render the inquiry as accurate and complete as possible; and, during its progress, not a street or court was left unexplored in search of schools of every description. The information contained in these pages is the result of personal observation, or has been received either from the proprietors of the schools or from their representatives, with the exception of one or two instances.

In the absence of any actual return of the population residing in the borough of Birmingham (to which this investigation has been restricted), the number of inhabitants may perhaps be fairly estimated at 180,000.* Of this number—

10,902 or 6.05	per cent. of the population attend day or evening schools only;
4,141 or 2.30	per cent. of the population attend both day or evening and Sunday schools;
12,616 or 7.01	per cent. of the population attend a Sunday school only; making a total of
27,659 or 15.36	per cent. of the population attending schools of some kind or other.

Of this number—

5,835	are under 5 or above 15 years of age; leaving
21,824	children between the ages of 5 and 15 attending school in the Borough of Birmingham at the time the schools were visited.

According to the population abstracts of 1821 and 1831, one-fourth of the total population consists of children between these ages. Hence it would appear, that of the 45,000 between the ages of 5 and 15 in the borough of Birmingham—

21,824 or 48.5	per cent. were receiving instruction in day and Sunday schools; and
23,176 or 51.5	per cent. were not found receiving instruction in either day or Sunday schools within the Borough of Birmingham.

NOTE.—This Report was sent to the Statistical Society of London for publication in the Journal, in accordance with a vote of the members of the Birmingham Statistical Society for the improvement of Education, with a request that the following Report of a Sub-Committee of that body, presented to the General Meeting held on the 22d August last, be inserted with it. Mr. Wood, who is therein referred to, is the agent who has been employed by the Statistical Society of Manchester, in the collection of the data contained in their several reports upon education. "The Sub-Committee appointed to revise Mr. Wood's Report found it impossible to test the accuracy of the statements contained in it, without going over the ground after that gentleman. With this observation the Sub-Committee return the Report, as Mr. Wood's Report, not taking upon themselves the responsibility of its statements, but, believing that it contains valuable information, they leave it with the General Committee to be dealt with as they think best."]

* In the year 1831 the population of the parishes of Birmingham was 146,986, which exhibited an increase of 33.0 per cent. on the preceding census in 1821. Assuming, therefore, that the same ratio of increase has been maintained, the population of 1838 will be about 185,000. But Saltley and the Manor of Aston, which lie within the parishes, are not included in the Parliamentary Borough; if 5,000 be allowed as the number resident in these places, there will remain a net population of 180,000.

The foregoing numbers allow to each child between the ages of 5 and 15, in the borough of Birmingham, an average period of 3·3 years' attendance at a day-school, and 3·7 years' attendance at a Sunday-school.

It would be presenting, however, but a partial view of matters to conceal the fact, that the number of children attending school in Birmingham, at the date of this inquiry, was much below the average, owing to the severity of the weather and the extreme depression of trade. To furnish the means of forming a correct estimate of the average number attending school in ordinary times, an account was obtained from the teachers of dame and common day-schools, of the extent to which the reduction from the aforementioned causes had affected the attendance in each school; and the following is the result:—

Reduction since summer in dame schools	796
Common day schools	376
Infant schools	200
Charity schools	110
Total reduction *	<u>1,482</u>

Of the attendance in superior schools no satisfactory account was obtained, beyond the bare representation that some had increased, several were stationary, and others had experienced a diminution.

If this alleged reduction of	1,482
Be added to the number of scholars when this inquiry was made	<u>27,659</u>
It will give a total of	<u>29,141</u>

or 16·19 per cent. of the population, as the number of children attending day, evening, or Sunday schools, in the borough of Birmingham, in ordinary times.

In the day and evening schools, the number of scholars between 7 and 14 years of age was also ascertained; but in the Sunday-schools it was found impossible to procure accurate information on this point. Out of 613 day and evening schools, having 15,943 scholars, the number in attendance between 7 and 14 years of age was ascertained in all but 3 schools, with 100 scholars. In the 610 schools, having 14,943 scholars, 6,438, or 43·18 per cent., were between 7 and 14; and 8,505, or 56·92 per cent., were either under or above those ages.

The exact difference between the returns on the state of education in Birmingham, made in pursuance of an order of the House of Commons, upon the motion of the late Earl of Kerry, and those presented by this inquiry, cannot be minutely made out; the former having embraced a somewhat wider field than that contained within the limits of the Parliamentary borough, to which the latter was restricted. The annexed summary (Table A.) will, however, suffice to prove that the information furnished by the Government returns was vague and imperfect. On inspection of the first part of this table, it will be seen that the only classification attempted in these returns has been into private, charity, infant, and Sunday schools. They contain no information respecting the nature and amount of instruction communicated in reference to the ages of the children, the time and manner of attendance, the terms charged, or the number of scholars to a teacher.

* From this number should be deducted those children attending schools which have been commenced since Christmas; but as some have been relinquished since that period (the number of which cannot be ascertained) they have been supposed to balance each other.

TABLE A.—Comparative View of the Education Return for Birmingham made in pursuance of an Order of the House of Commons upon the motion of the late Earl of Kerry, in 1833, and the results of the present Inquiry in 1838.

Government Returns, 1833.				
Description of Schools.	Schools.	Scholars.		
		Males.	Females.	Total.
Infant Schools	12	not	stated.	781
Charity Schools	21			2,788
Private Schools	149			3,774
Total, Day and Evening Schools	182	..	..	7,343
Sunday schools	46	7,141	5,738	12,879
Total Number of Scholars . .	228	..	..	20,222*

Results of the present Inquiry, 1838.				
Description of Schools.	Schools.	Scholars.		
		Males.	Females.	Total.
Private Infant Schools	3	29	39	68
Dame Schools	267	1,829	2,071	3,900
Common Day Schools	177	2,007	2,273	4,280
Superior Private and Boarding Schools	97	989	1,177	2,166
Supported by Parents	544	4,854	5,560	10,414
Charity Schools	26	2,100	1,231	3,331
Infant Schools aided by the Public . .	7	442	293	735
Total, Day Schools	577	7,396	7,084	14,480
Evening Schools	36	367	196	563
Total, Day and Evening Schools	613	7,763	7,280	15,043
Sunday Schools	56	9,284	7,473	16,757
Total	669	17,047	14,753	31,800
Number of children in Day Schools who attend Sunday Schools . .				4,141
Net number under instruction				27,659

	1833	1838
Proportion of Infant Scholars	3.86	2.31
„ of Charity	13.79	10.47
„ of Private	18.67	34.52
„ of Sunday	63.68	52.70
Total	100.	100.

No further comparison can be instituted between the above investigations, since the exact increase of the population has not been ascertained, and the Government returns include Salfley, the manor, and some other portions of the parish of Aston, which, in consequence of their lying beyond the boundaries of the borough, were not included in the late inquiry.

* No account has been furnished in the Government Returns of the numbers who attend bothday and Sunday schools.

The following table (B.) affords a comparative view of the numbers attending school at the period of the respective inquiries in the boroughs of Manchester and Salford, Bury, Liverpool, and York, in certain parishes in the city of Westminster, and in the borough of Birmingham.

TABLE B.—Comparative Statement of the Number receiving Instruction in the following Places.

	The boroughs of Manchester and Salford, in 1834 and 1835.			The Borough of Bury, in 1835.			The Borough of Liverpool, in 1833 and 1836.			The City of York, in 1836.			Four Parishes* in the City of Westminster, in 1837.			The Borough of Birmingham, in 1838.		
	Per centage		Scholars.	Per centage		Scholars.	Per centage		Scholars.	Per centage		Scholars.	Per centage		Scholars.	Per centage		Scholars.
	Of the total number of	estimated at 250,000.		Of the total number of	estimated at 20,000.		Of the total number of	estimated at 250,000.		Of the total number of	estimated at 28,000.		Of the total number of	estimated at 43,000.		Of the total number of	estimated at 180,000.	
Attending day or evening schools <i>only</i>	13,239	5.20	23,561	1,503	7.51	26,241	17,815	7.75	53,69	2,928	7.96	39,85	3,215	7.46	67.40	10,902	6.05	39.41
Attending <i>both</i> day or evening and Sunday schools	13,421	5.26	23,891	1,122	5.61	19,591	11,649	5.06	35.10	2,521	9.00	45.00	889	2.06	18.63	4,141	2.30	14.97
Attending Sunday schools <i>only</i>	26,660	10.46	47.45	2,625	13.12	45,832	29,464	12.31	88.79	4,749	16.96	84.94	4,104	9.52	86.03	15,043	8.35	51.38
	29,529	11.58	52.55	3,102	15.51	54.17	3,719	1.62	11.21	842	3.01	15.06	666	1.55	13.97	12,616	7.01	45.62
Number of scholars estimated to be under 5 or above 15 years of age	56,189	22.01	100.	5,727	28.63	100.	33,183	14.43	100.	5,591	19.97	100.	4,770	11.07	100.	27,659	15.36	100.
Children between 5 and 15 years attending school	44,199	..	..	4,107	..	..	27,183	..	..	4,571	..	..	3,658	..	..	21,824	..	..
Estimate of the total number of children between 5 and 15 years of age	63,750	..	..	5,000	..	..	57,500	..	..	7,000	..	..	10,756	..	..	45,000	..	..
Number between 5 and 15 years of age not attending school	19,551	..	..	893	..	..	30,317	..	..	2,429	..	..	7,092	..	..	23,176	..	..
Per centage proportion of ditto	30.7	..	..	17.86	..	..	52.7	..	..	34.7	..	..	65.9	..	..	51.50	..	..

* The Parishes of St. Martin's-in-the-Fields, St. Clement Danes, St. Mary-le-Strand, St. Paul, Covent Garden, and the Savoy.

Dame Schools.

This class of schools is very numerous in Birmingham; but the average number of scholars to a school is much lower than in other places, as will be seen by the following statement:—

Places.	Number of Dame Schools.	Number of Teachers.	Scholars.	Number of Scholars to a School.	Number of Scholars to a Teacher.
Manchester . .	230	234	4,722	20·5	20·2
Bury	29	31	840	28·9	27·1
Salford	65	66	1,543	23·7	23·4
Liverpool . . .	244	250	5,240	21·4	20·9
York	37	38	745	20·1	19·6
Birmingham . .	267	269	3,900	14·6	14·5
Total	872	888	16,990	19·48	19·29

In making an allowance for the diminished attendance in this class of schools at the period of this investigation, it will be proper to bear in mind, that in two of the places enumerated in the preceding list, viz., Manchester and Liverpool, the number in attendance was similarly affected, although perhaps not quite to the same extent as it was in Birmingham. In Manchester the cholera was very prevalent, and some schools were in consequence nearly deserted. In Liverpool, typhus and scarlet fever, with measles and small-pox, were remarkably fatal (particularly among children) during the greater part of the progress of the inquiry.

The following table contains the results of the information which was obtained from the teachers in Birmingham on this subject:—

Ratio of Reduction.	Number of Schools.	Number of Scholars.	Extent of Reduction.
Two-thirds	2	15	30
One-half	16	148	296
One-third	41	710	331
One-fourth	14	175	58
One-fifth	10	177	35
One-sixth	15	230	38
One-tenth	5	78	8
No perceptible reduction . . .	164	2,367	..
Total	267	3,900	796

Thus it appears that the old-established dame schools had experienced a total diminution of 796. It is impossible to determine how much of this is to be attributed to the season and the times, and how much to the opening of other schools. For it will be seen on reference to Table No. II., that, in the course of last year (the period during which the falling off

is alleged to have taken place), no less than 67 dame schools, with 737 scholars, have been commenced.

The physical condition of the dame schools of Birmingham is much more satisfactory than could have been anticipated. None of them are kept in cellars, very few in garrets or bed-rooms, and they are generally more cleanly and better lighted than schools of the same description in Manchester and Liverpool. They are, however, ill ventilated, and particularly so in those districts in which the resident population is chiefly of the poorer class.

Of the whole 267 schools in the borough, 43 are set down as close, and 163 as very close, even in the winter season. The majority of the teachers of these schools are very poor; some were found suffering extreme privation, and nearly the whole complained of their inability to provide a sufficient number of suitable books; hence they were generally ill supplied in this respect, and some were entirely without books.

It is very commonly alleged, in extenuation of the neglect of teachers of dame schools, that the scholars are too young to be susceptible of much instruction, whereas in reality they are more open to judicious cultivation at this period than at any other, habits being then formed, tastes acquired, associations and impressions received, and principles inculcated, which lie at the basis of the future character, and oftentimes determine the happiness or misery of the individual.

Out of 3,900 children attending dame schools in Birmingham—

1,726 or 44·26 per cent. are under 5 years of age.

1,216 or 31·18 per cent. are above 5 but under 7 years of age.

2,942 or 75·44 per cent. are under 7 years of age, and

958 or 24·56 per cent. are above 7 years of age.

3,900 Total.

Of the 1,726 scholars under 5 years of age, only 25, or 1·45 per cent., attend Sunday-schools; and of the 2,174 above 5 years of age, 791, or 36·38 per cent., attend Sunday-schools.

Few circumstances tend more fully to reveal the defective character of this class of schools than that of their very ephemeral nature. Out of the 267 dame schools in Birmingham, only 73, or 27·34 per cent., were in existence in 1830; while 194, or 72·66 per cent., have been established since that period, and of this number 67, or 34·53 per cent., have been opened during the last 12 months.

It is one of the most serious defects of the dame schools, that they are generally taken up by persons destitute of every qualification for teaching, and who have no other object in view than obtaining a subsistence. In innumerable instances the occupation is laid aside after a short trial, as an unprofitable speculation. Unfortunately, these repeated failures are not found sufficient to prevent others, who are pressed by similar necessities, from making new attempts, attended with no better success. One of the mistresses, when visited, complained of the unprofitable nature of her employment, and being asked why she continued it, replied, "Bless you, I would not keep school another day, but I can do nothing that pays me better. I am sure I have prayed every

day since I began, that it may *do*, but it's no use; I can't get my prayers answered: instead of that it gets worse and worse." Taking into consideration the average terms charged in dame schools, viz., $3\frac{1}{2}d.$ per week (see Table IV.), with the mean number of scholars to a school, viz., 14.6, the average weekly receipt of the teachers will only amount to 4s. $3\frac{1}{2}d.$ each, which fully justifies the representations they make of the unproductive nature of the employment.

Hence arise the frequent instances in which mistresses of dame schools unite some other occupation with that of teaching. Out of 267, there were 190, or 71.16 per cent., following some other employment, frequently trenching largely on the teacher's time, distracting the attention of the children, and totally incompatible with the proper discharge of the duties of teaching. What, for instance, can be more improper, and more calculated to interfere with scholastic duties (allowing the mistress to be anxious to discharge them, which is not often the case), than conducting the process of washing in the school-room, or in a room adjoining, which is not an uncommon occurrence in some neighbourhoods? In speaking of their occupation as schoolmistresses, very few will hesitate to designate it as tiresome and unpleasant, without any other motive to stimulate, or hope to encourage their exertions, than hard necessity.

Moral and religious instruction forms no part of the system in dame schools; unless a liberal administering of the rod or cane, when a child has offended, can be regarded as the former, and the committing to memory some portion of Catechism is worthy of the appellation of the latter. The number who professedly administer corporal punishment is 203. The cane or rod is generally a conspicuous object on entering the school, when, as is frequently the case, it is not in the hands of the mistress. In the department of moral training the deficiency is equally lamentable, and the few means which are resorted to, under the idea of effecting a moral improvement, are for the most part decidedly injurious. A mistress in one of this class of schools, on being asked whether she gave moral instruction to her scholars, replied, "No, I can't afford it for 3d. a-week." Another, in reply to the same question, said, "How is it likely, when they can hardly say their A, B, C?" Several did not know the meaning of the question; and of those who did, very few appeared to think it was a part of their duty to instruct the children in morals. Several have candidly owned that they lay under this impression. One, in particular, insisted, with much warmth, that to teach morals was the duty of the parents, not hers. Another simple-minded but well meaning individual observed, that she did not presume to teach morals, "but she strove to *imbibe* good principles into them."

In only 21 out of the 267 schools is moral instruction professed to be attended to; and in this number the art of moral training is very imperfectly understood. The religious instruction communicated in dame schools is much upon a par with that of morals. In 229 schools the Church Catechism, or the Catechism for Children by Dr. Watts, is repeated, generally once a-week; in 2, the religious instruction is restricted to committing to memory a few hymns for children, the Ten Commandments, and the Lord's Prayer; and in 24 schools no religious

instruction is attempted. The remaining 13 profess to afford some explanation of the Catechism which they use, and of the portions of Scripture which form the lessons of the upper classes in the school. It is needless to enter into any further detail of facts; the true character and condition of these schools is best understood by a short observation of the manners, opinions, and feelings of the teachers, as they are exhibited in the ordinary routine of the school, or are elicited by familiar conversation. These speak more eloquently and to the point than those extraordinary occurrences which, being rare, might therefore be regarded rather in the light of exceptions than as characteristics of the class.

Wretchedly conducted as dame schools generally are, there are a few cases in which the pleasing effects produced in a school, under the management of a mistress animated by a proper spirit, and possessing some qualification for the office, are very visible, being the more striking from the strong contrast which they present to the generality of such schools.

Taking into consideration the extreme youth of the children attending these schools, together with the meagre amount of instruction, the total absence of properly qualified teachers, and the general impression which prevails among them, that the children are only sent to be kept out of the way, there will be some danger of over-estimating their value, if they are set down, as a whole, as representing much more than nurseries, where the children of the working-classes are taken care of.*

Common Day Schools.

Under this head has been arranged that class of schools which are attended by the children of small shopkeepers, mechanics, and work-people, who have generally passed their probation in a dame school, and are sent to these to complete their education.

The classification of these and the superior schools is attended with some difficulty, since it sometimes happens that children of the working classes are found in superior schools, in cases where the parents appreciate the importance of a liberal education, and make, perhaps, some sacrifices to secure it for their children; and, on the other hand, children of more wealthy parents are occasionally met with in common day schools in cases where parents regard the advantages of a good education as not equivalent to the expense. The changes which are continually taking place in the character and terms of schools is another source of difficulty. Some, at the commencement properly belonging to the order of superior schools, gradually degenerate, and the terms become reduced, till they reach the level of common day schools; whilst others advance in their terms, and enlarge their course of instruction, until they rise from common day schools into the class of superior schools.

The two principal considerations which have been regarded in forming the annexed Tables have been the terms charged and the subjects taught, where the information on these points could be safely relied on. In

* This will be taking them at the estimate of the teachers themselves, for many of them have made the remark, that children are sent to them more to be out of "harm's way" than for what they learn.

most of the common day schools the payments are weekly; some, however, are either weekly or quarterly, at the option of parents, and a few profess to be only quarterly.

There are in Birmingham 177 common day schools; of which number 54, with 1,727 scholars, are conducted by masters, and 123, with 2,553 scholars, are kept by mistresses; giving an average of 31.9 scholars to a school in the boys' schools, and of 20.4 scholars to a school in the girls' schools.

The following Table will show the number of scholars to a school, and to a teacher, as compared with other places:—

Places.	Number of Schools.	Number of Teachers.	Scholars.	Number of Scholars to a School.	Number of Scholars to a Teacher.
Manchester	179	210	6,790	37.9	32.3
Bury	17	21	808	47.5	38.5
Salford	42	54	1,814	43.1	33.6
York	23	26	549	23.8	21.1
Birmingham	177	205	4,280	24.1	20.8
Liverpool	194	242	6,096	31.4	25.1
Total and average	632	758	20,337	34.2	26.8

The number of children attending common day schools is 4,280, or 2.37 per cent. of the population. Of this number, 595, or 13.8 per cent., are under 5, and 37, or 0.9 per cent., are above 15 years of age; leaving 3,648, or 85.3, between those ages. Thus it appears that a proportion of 8.1 per cent. of the children between 5 and 15 years of age are attending common day schools. The number between 7 and 14 years of age in this class of schools is 2,771, or 64.7 per cent., upon the total number in attendance, leaving 1,509, or 35.3 per cent., either under 7, or above 14, years of age.

The following view of the estimated reduction in attendance since the previous summer is drawn up from the information obtained from the teachers of the respective schools, by which it will be seen that the numbers do not appear to have fallen off in the same ratio as in the dame schools:—

Rate of Reduction.	Schools.	Scholars.	Extent of Reduction.
One-half	8	129	129
One-third	9	183	91
One-fourth	15	323	106
One-fifth	3	72	14
One-sixth	8	288	36
Either not affected, or opened } during, or since, last summer }	131	3,285	. .
Total	177	4,280	376

Thus the total reduction, owing to the season and the state of trade, amounts to 376, or 8·7 per cent., on the number in attendance in common day schools; while in dame schools the reduction bore a percentage of 20·4 on the total number in attendance.

Ventilation is very little attended to in these schools; and in some cleanliness is equally neglected. There is generally a much greater number of children crowded together than in dame schools; and the effluvia arising from the dress of scholars mingled with the close air, exhausted of its oxygen, and unfit for the purpose of comfortable or healthy respiration, renders any long continuance in the school intolerable to a person unaccustomed to it. Notwithstanding these evils, which depress the energies of both the teacher and the pupil, the plan of allowing half an hour's interval, morning and afternoon, for the purposes of ventilation and exercise, is never adopted; and, when suggested to them, it is generally set aside, on the plea that it would be impossible to spare the time.

The girls' schools are generally superior to the boys' schools in this respect, which may, perhaps, be owing chiefly to the average number of scholars to a school being much less. The average in boys' schools is 32, and in girls' schools 20.

The systems of instruction adopted are of the most imperfect kind; the general principle of by far the largest number is that of requiring the child to commit to memory a certain quantity of matter, without any attempt being made to reach the understanding. Instead of the master exerting himself to teach, the scholars are expected to learn. In only 29 out of the whole 177 schools of this class do the teachers profess to interrogate the children on what they read and learn. The usual objection to the plan of interrogation, when mentioned to the teachers, is, that they have not time: 8 out of the 29 who do interrogate the scholars admit that it is only done occasionally, when time and opportunity permit. As in the dame schools, corporal punishments form almost the whole of the moral training in these establishments. No less than 100, however, profess to teach morals. Many of these, when further questioned upon the subject, admitted that the punishment of immoral conduct, combined, perhaps, with the enunciation of a few moral truths, comprised the whole of the moral means which they employed for this purpose. One individual stated that the spelling-books were full of "moral lessons," and "he taught them these." Another observed that "there was nothing like keeping a sharp eye upon them;" and, in addition to this, he emphatically observed, "I never let them escape without punishment."

The mental constitution of children is very little, if at all, regarded; much less is the treatment of each scholar adapted to its peculiar habit and disposition of mind. Skill in the merely mechanical operation of writing is put forth by the teacher possessing it, and is generally admitted by the public as a sufficient qualification for the office, irrespective of mental cultivation, or even of moral qualities. So long as this fallacious test is admitted, the evils arising out of it will continue to be inflicted on the community, exhibiting itself in the unenlightened minds and uncultivated morals of those who go forth into society from under such pupilage.

As in dame schools, religious instruction in common day schools is restricted to learning the Church or Assembly's Catechism by rote, and, perhaps, reading the Scriptures. In many schools even these are dispensed with, on the plea that the parents are of different religious creeds.

Taken as a whole, the utmost amount of benefit which accrues to the public from this class of schools will include facility in reading and writing, and some knowledge of arithmetic; to which must be added, in the girls' schools, needlework, with occasionally an acquaintance with the rudiments of grammar, history, or geography, which, in very many cases, are imperfectly understood, or so acquired as to be of no real value, being soon forgotten. It would be unfair, however, to attribute the whole of this inefficiency to the teachers; they labour under many disadvantages, among which may be reckoned poverty, irregular attendance on the part of the scholars, and the early age at which children are taken away from school.

Superior Schools.

As the object of this inquiry was principally to ascertain the condition of the working classes with respect to education, little more has been attempted in reference to superior schools, than obtaining a correct numerical account of the scholars, teachers, and subjects of instruction, the particulars of which are embodied in the tables.

There are 97 superior schools, attended by 2,166 scholars. In this number are included two public institutions, viz., the Friends' Quarterly Meeting school, and the Birmingham and Edgbaston Proprietary school.

Charity Schools.

There are in Birmingham 26 charity schools, of various descriptions, containing 3,331 children, viz., 2,100 boys, and 1,231 girls; 93 being under 5 years of age, 3,208 between 5 and 15, and 30 above 15 years of age. One of these is the Free Grammar school, with an elementary branch school, belonging to that establishment, which has been lately opened, and is conducted on the Sessional plan.* In both of these the instruction is gratuitous; in two, viz., the Blue-coat school, and the Protestant dissenting girls' charity-school, the scholars are clothed and boarded as well as educated gratuitously. In Crowley's charity, and the poor-house and asylum schools, † the children also receive gratuitous instruction.

In the remaining 19 schools a small charge is made, varying from a penny to fourpence per week for each scholar, except in the case of the Deaf and Dumb asylum, in which children are boarded and educated at a charge varying from 8*l.* to 28*l.* per annum; and in four of the charity day-schools, in which a small number of poor children are admitted free, amounting in the whole to 24.

The attendance is very fluctuating, arising from the poverty or caprice of parents, more especially among boys who have arrived at an age to obtain some situation, and with girls who are enabled to assist in nursing

* A second was opened in the autumn of 1838; a third is intended to be opened this spring (1839); and a fourth ere very long.

† The asylum is attached to the poor-house establishment for the reception of the infant poor.

and household work. The former, when out of situation, and the latter, when not required at home, may, perhaps, be again sent to school, but oftentimes not till what has been previously acquired is nearly forgotten, and the teacher has to commence *de novo*, subject to the recurrence of similar interruptions in time to come.

The following table indicates the extent to which these disturbing causes affect the attendance in the generality of the charity-schools, particularly in such as make a charge for the instruction.

TABLE of the Number of Scholars admitted into the annexed Public and Charity Schools, during 1837.

Schools.	Number admitted in 1837.	Number in attendance.	Average Time at School.		
			Years.	Months.	Weeks.
National, Pinfold-street . . .	175	150	..	10	1
Wesleyan, Union-street . . .	161	255	1	7	..
Christchurch School of Industry	106	135	1	3	1
Protestant Dissenters' Girls' School	14	45	3	2	2
Blue-coat School	43	200	4	7	2
St. Peter's (Catholic)	100	160	1	7	1
St. Bartholomew's	183	147	1	2	3
Gibb Heath	100	70	1	1	3
St. George's *	361	90	..	3	..
New Jerusalem (Boys)	122	180	1	5	3
Lancasterian	233	324	1	4	2
Deaf and Dumb Asylum	9	53	5	10	2
Bordesley and Deritend	104	190	1	9	2
St. John's School of Industry	40	30	..	9	..
Crowley's Charity	4	10	2	6	..
Girls' School, Lancasterian (New)	125	136	1	1	..
Total	1,880	2,175	..	..	..
Average time . . . . .	..	..	1	1	3

From the remaining 10 schools, the number admitted in 1837 could not be ascertained.

In 19 of the charity-schools, containing 2,933 scholars, the monitorial system is adopted; and in the other 7 schools, with 398 scholars, the monitorial system is not pursued.

The physical condition of this class of schools is decidedly favourable, when compared with some other places. They are, with exceptions, tolerably well ventilated, clean, and generally light; a few of them have play-grounds attached, but it is to be regretted that scarcely any avail themselves of this circumstance, by allowing an interval of half an hour, morning and afternoon, to give the scholars a little exercise, and to ventilate the school-room. Hence, even in winter, a languor and heaviness appeared to oppress both the master and his pupils, (after they had been assembled two hours or more,) which the continuous attention to

* The first year this school was opened the number of admissions was upwards of 800, although the number on the books never exceeded 150.

school business in an atmosphere gradually deteriorating necessarily produces, and which must be aggravated exceedingly by the state of the atmosphere in summer and autumn.

Speaking generally, these schools are, in their conduct and efficiency, much in advance of the common day-schools; but they are susceptible of great improvement.

Reading, writing, and arithmetic, with sewing and knitting in the girls' schools, comprehend, with few exceptions, the chief subjects which are taught in them; to which is added some slight acquaintance with the religious tenets of those by whom the school is principally supported.

Little worthy of the name of moral training exists, the subject being very imperfectly understood, and the teachers not being put in possession of a sufficient number of intelligent assistants to enable them to carry it on effectually. Nevertheless in many schools they effect far more than could be expected from persons furnished only with the means of teaching the greatest number at the least possible expense.

Infant Schools.

There are 10 schools of this description in Birmingham, with 803 scholars, conducted on the system of Wilderspin, with modifications suited to their respective circumstances. Three of these schools, with 68 scholars, are for the children of the middle class of society, and are supported entirely by the payment of the scholars. The 7 remaining infant schools contain 735 scholars, viz., 442 boys, and 293 girls; 349 of these, or 47·5 per cent. are under 5 years of age; 272, or 37·0 per cent. are above 5 and under 7 years of age; and 114, or 15·5 per cent. are above the latter age.

They are well ventilated, and allow an interval during each half of the day for the recreation of the scholars.

The whole of the infant schools in Birmingham are conducted by females, who appear by nature the most suitable for the management of children at the tender age at which they are admitted into them. The number of scholars to a teacher is 61, and, where the attendance is tolerable, appears to be beyond what is desirable, whatever may be the opinion of the founder of the system.

The want of means which operates in the case of charity-schools offers an impediment to the introduction of improvements. The moral and religious instruction is much superior to the generality even of charity-schools, and the mode of communication by simple questions and apt illustrations is calculated, under a judicious teacher, to reach the understanding, and to engage the affections; and it is much to be regretted, that some method analogous to that now under notice is not in use for children of greater age and more advanced in knowledge.

Evening Schools.

The evening schools in Birmingham are 36 in number, and have 563 scholars in attendance: 301, or 53·4 per cent., are between the ages of 5 and 15; and 262, or 46·6 per cent., are above 15 years of age. They are commonly conducted by the masters of day-schools; the instruction consisting principally of reading, writing, and arithmetic, although, in

several, grammar and geography are added to these, and, in a few, drawing and mathematics. The terms are from threepence to a shilling per week, being regulated by the respectability of the establishment, and the subjects of study.

Were the hours of labour somewhat abridged, evening schools appear calculated to be far more extensively useful than they are at present.

Sunday Schools.

Sunday schools were introduced into Birmingham very early after their first establishment by their venerable founder, and they have been gradually increasing in number, and improving in character and efficiency, down to the present time.

There are now 56 Sunday schools in the borough, with 16,757 scholars on the books; viz. 9,284 boys, and 7,473 girls. Only 118, or 0·7 per cent., are under 5 years of age; 14,320, or 85·4 per cent., are between the ages of 5 and 15; and 2,319, or 13·9 per cent., are above 15 years of age. Of these, 4,141 attend day-schools also, leaving 12,616 receiving Sunday school instruction only. The average attendance is 12,224, or 72·8 per cent.

The majority of these schools are conducted by gratuitous teachers, although in nine of them a few paid teachers are employed in conjunction with the gratuitous teachers. A custom prevails in the girls' schools of providing each scholar with a white cap and tippet, which she is expected to wear during school hours. Reading is taught in all the Sunday schools in Birmingham; writing is taught in 25 schools, having 7,329 scholars; arithmetic in 7 schools, with 2,067 scholars; grammar and history in 4 schools, with 1,577 scholars; and geography in 5 schools, with 2,124 scholars.

To 21 of the other schools, evening schools* are attached, in which a portion of the scholars receive instruction in writing, arithmetic, sewing, or a few other subjects, which are deemed of too secular a nature to be taught on the Sabbath.

The primary objects of Sunday schools being the inculcation of religious knowledge, the Bible is the principal book used: the junior classes reading in the New Testament, as soon as they are able to do so, and the senior classes using both the Old and New Testaments. The exceptions to this are the Catholic schools in Shadwell-street, in which the history of the Bible is the principal class book; and the Sunday school for infants attached to St. Thomas's, in which scripture extracts adapted to the capacities of young children are employed.

Although the average time allotted to instruction, including the time devoted to prayer and singing, does not exceed four hours per week, the beneficial influence of Sunday schools is extensively felt throughout the whole neighbourhood, the majority of them being most judiciously conducted.

The amount of attainments in general education which they are instrumental in imparting may, when compared with the extensive means in operation, fall very far short of the end aimed at; yet it can, by no means, be regarded as contemptible, when it is known that in 23 Sun-

* The information obtained respecting these will be found in a table at the end of the Sunday School tables.

day schools in Birmingham, no less than 332 of the gratuitous teachers, out of 907, were formerly Sunday scholars.* Of the teachers in the 33 other Sunday schools, no account was obtained.

As a moral means, the value of Sunday schools cannot be too highly appreciated, especially when the present imperfect character of day-school instruction, together with the inability of a large number to avail themselves for any lengthened period even of that, is taken into consideration. If they have not, to any very great extent, possessed a positively elevating power in improving the character and habits of those who have come within the sphere of their influence, their negative force has been exerted far beyond the limits generally assigned to it. They have been the means of infusing the most powerful moral checks into the consciences of tens of thousands, which, though too feeble, and not of a nature capable of constraining to the exercise of active virtues, have interposed a barrier, in all cases more or less operative, which has retarded the sinner in the course of vice, and society has reaped the advantage in immunity from its consequences. Of the amount of religious instruction it is difficult to speak; some schools are more, others less efficient, but, on the whole, the Sunday schools in Birmingham must rank higher than those of any other place which has been subject to a similar investigation. Still it must be borne in mind, that Sunday schools can never be regarded as substitutes for a general system of education, although they are powerful auxiliaries, and, under existing circumstances, stand foremost among the means of acting beneficially upon the dense masses of the working population.

TABLE I. DAY AND EVENING SCHOOLS.—Summary of Schools and of Children receiving Education, exclusive of Sunday Schools.

Description of Schools.	Number of Schools.	Number of Teachers.	Scholars.			Number who attend Sunday Schools.
			Boys.	Girls.	Total.	
Private Infant Schools . . .	3	4	29	39	68	..
Dame Schools	267	269	1,829	2,071	3,900	816
Common Day Schools {	Boys	54	63	1,354	373	1,727
	Girls	123	142	653	1,900	2,553
Superior Schools . . . {	Boys	25	45	792	17	809
	Girls	72	139	197	1,160	1,357
Supported solely by the Parents	544	662	4,854	5,560	10,414	1,838
Infant Schools assisted by the Public	7	12	442	293	735	196
Charity and Endowed Schools	26	48	2,100	1,231	3,331	1,910
Total of Day Schools	577	722	7,396	7,081	14,480	3,974
Evening Schools	36	38	367	196	563	167
Total of Day and Evening Schools	613	760	7,763	7,280	15,043	4,141

* In the Report of the Manchester Sunday School Union, just published, it appears that out of 1,133 teachers engaged in the schools connected with the Union, 617, or above one-half, were formerly Sunday scholars.

TABLE 2. DAY AND EVENING SCHOOLS.—Date of Establishment.

Date.	Private Infant.	Dame.	Common.		Superior.		Charity Infant.	Charity and Endowed.	Evening.	Total.
			Boys.	Girls.	Boys.	Girls.				
Before 1801 . . .	..	2	3	2	1	1	..	7	1	17
1801 to 1810 . . .	..	4	2	7	..	2	..	2	2	19
1811 to 1820 . . .	..	16	8	5	4	8	..	4	5	50
1821 to 1830 . . .	1	51	12	29	10	15	3	1	6	128
Since 1830 . . .	2	194	29	79	10	46	3	12	22	397
Not ascertained . . .	..	..	..	1	..	..	1	..	..	2
Total . . .	3	267	54	123	25	72	7	26	36	613

TABLE 3. DAY AND EVENING SCHOOLS.—Statement of the Mode [in which the Schools are supported.

	Schools.	Scholars.			
		Boys.	Girls.	Total.	
—					
FREE—No part of the expense being borne by the scholars.					
Clothes, board, and education provided.	5	316	214	530	
Partial clothing and education provided.	1	..	10	10	
Education provided	2	202	30	232	
—					
NOT FREE—Part of the expense being borne by the scholars.					
Charity Schools of various descriptions .	19	1,618	1,006	2,624	
Infant Schools assisted by the public .	6	496	264	670	
		33*	2,542	1,524	4,066
NOT FREE—The whole expense being borne by the scholars.					
Private Infant Schools	3	29	39	68	
Dame, Common, and superior Day and Boarding Schools, including two Proprietary Schools	541	4,825	5,521	10,346	
Evening Schools, exclusive of the Classes of the Mechanics' Institution . . .	36	367	196	563	
Total	613	7,763	7,280	15,043	

* Three of the charity schools were founded by endowment, 11 are supported by subscription, 1 by congregational collections, 3 chiefly by private benevolence, 12 by subscriptions and congregational collections, and 3 out of the poor's rates.

TABLE 4. DAY AND EVENING SCHOOLS.—Statement of the Charge for Instruction in Schools supported entirely by payments of the Scholars, exclusive of Superior Schools.

Rate of Charge,*	Private and Infant Schools.		Dame Schools.		Common Day Schools.				Evening Schools.	
	Schools.	Scholars.	Schools.	Scholars.	Boys.		Girls.		Schools.	Scholars.
					Schools.	Scholars.	Schools.	Scholars.		
Weekly:—										
2d. . . . .	..	..	8	82	..	..	1	6	..	..
3d. . . . .	..	..	136	1891	1	17	..	..	2	19
4d. . . . .	..	..	104	1627	1	18	3	57	1	38
4d. . . . .	..	..	..	..	..	..	..	..	1	50
5d. . . . .	..	..	..	..	..	..	..	..	1	15
6d. . . . .	..	..	19	300	8	134	34	684	12	176
8d. . . . .	..	..	..	..	4	126	40	803	1	36
9d. . . . .	..	..	..	..	5	125	2	35	..	..
10d. . . . .	..	..	..	..	9	292	14	283	4	49
1s. . . . .	..	..	..	..	18	638	18	469	6	76
1s. 1d. . . . .	..	..	..	..	1	50	..	..	..	..
1s. 3d. . . . .	..	..	..	..	1	55	..	..	..	..
Quarterly:—										
8s.	2	56	..	..	..	..	..	..	..	..
10s.	1	12	..	..	..	..	..	..	..	..
Total	3	68	267	3900	48	1455	112	2337	29	459
Average Charge	8s. 8d.		3 ⁹ d.		9 ¹⁷ d.		8 ³ d.		7 ¹ d.	

In 17 common day schools and 7 evening schools the information could not be obtained.

In the dame schools, the highest charge made for reading, sewing, and knitting, has been taken in forming this Table.

In the common day schools, the highest charge made in each case for reading, writing, and arithmetic, with sewing and knitting in the girls' schools, has been taken. An additional charge of 2d. or 3d. per week is usually made for instruction in any other branch of education.

TABLE 5. DAY AND EVENING SCHOOLS.—Statement of the Ages of the Children.

—	Schools.	Scholars.			
		Under 5.	Between 5 and 15.	Above 15.	Total.
Dame Schools	267	1,726	2,174	..	3,900
Common Day Schools { Boys	54	76	1,639	12	1,727
{ Girls	123	519	2,069	25	2,609
Superior Private and { Boys	25*	7	752	50	869
Boarding Schools . . { Girls	72*	107	1,119	101	1,301
Private Infant Schools. . . .	3	41	27	..	68
Infant Schools assisted by the public	7	349	386	..	735
Charity Schools	26	93	3,268	30	3,331
Evening Schools	36	..	301	262	563
Total	613	2,918	11,645	480	15,043

* In one superior private school, containing 50 boys, and in two schools of the same class, containing 50 girls, the information was not obtained; the ages of the scholars have, therefore, been calculated upon the average of those whose ages have been ascertained.

TABLE 6. DAY AND EVENING SCHOOLS.—Subjects professed to be taught in each Class of Schools.

Subjects.	Dane.	Common.		Superior.		Infant.		Charity.	Evening.	Total.
		Boys.	Girls.	Boys.	Girls.	Private.	Public.			
Out of a Total Number of	267	54	123	25	72	3 <i>a</i>	7 <i>a</i>	26	36	613
Spelling monosyllables . . .	3	..	..	..	..	..	..	..	..	3
Reading	264	54	123	25	72	3	7	25 <i>e</i>	36	609
Writing	2 <i>b</i>	54	123	25	72	1	2	23	36	338
Arithmetic . . . . .	..	50	96	25	71	2 <i>c</i>	17 <i>d</i>	24	32	307
Sewing	199	7	123	1	69	1	2	21	3	426
Knitting	141	3	61	..	9	1	2	19	1	237
Grammar . . . . .	..	44	68	25	72	..	..	10	21	240
Geography . . . . .	..	27	44	25	72	..	..	9	13	190
History . . . . .	..	19	30	25	64	..	..	6	6	150
Drawing . . . . .	..	6	7	22	50	..	..	1	2	88
Music . . . . .	..	..	1	10	59	..	..	1	..	71
Classic languages . . . . .	..	..	..	23	10	..	..	2	..	35
Modern do. . . . .	..	..	..	15	42	..	..	2	..	59
Mathematics . . . . .	..	5	..	20	2	..	..	4	1	32
Domestic duties . . . . .	..	..	..	..	..	..	..	5	..	5
Industrial employments . . . . .	..	..	..	..	..	..	..	2	..	2
Morals	21	33	67	24	50	3	7	25	10	240
Religion, viz.—										
Instruction	13	23	53	15 <i>f</i>	56	3	7	21 <i>h</i>	8	199
Catechisms	229	15	53	3 <i>g</i>	12	..	..	4	3	319
Prayers and hymns	2	..	..	..	..	..	..	1	..	3
No religious instruction	24	15	14	7	3	..	..	..	..	63

a In all these schools instruction is given in the elements of general knowledge. *b* On slates only. *c* In one of these schools the arithmetical tables are committed to memory only. *d* In all of these schools the arithmetical tables are committed to memory, and in two of them some progress has been made in mental calculations. *e* Reading, but not articulation, is taught in the Deaf and Dumb Asylum; and, therefore, it is included among these schools. *f* In two of these, doctrinal points are avoided. *g* In one of these, doctrinal theology is avoided. *h* In one of these, no creed is inculcated.

TABLE 7. DAY AND EVENING SCHOOLS.—Information relative to the Teachers.

	Dane.	Common.		Superior.		Infant.		Charity.	Evening.	Total.
		Boys.	Girls.	Boys.	Girls.	Private.	Public.			
Out of the total number of Teachers	267	54	123	25	72	3	7	26	36	613
No other occupation	77	44	110	23	70	3	7	2	6	342
With other occupations	190	10	12	2	..	..	..	24	30	268
Years engaged in teaching, viz.—										
Less than 1 year	53	3	17	..	3	1	..	2	3	82
1 year	33	2	7	..	5	..	2	1	2	52
2 years	32	2	12	..	7	..	..	1	..	54
3 "	20	1	6	..	6	..	1	2	..	36
4 "	18	3	7	1	5	..	..	1	3	38
5 "	16	7	4	1	5	..	1	4	4	42
6 "	7	1	6	3	2	..	3	2	..	24
7 " and upwards	87	34	62	19	37	2	..	13	23	277
Place of birth, viz.—										
England and Wales	261	51	119	24	70	3	7	23	33	594
Scotland . . . . .	..	..	..	1	..	..	..	..	..	1
Ireland . . . . .	..	..	..	..	1	..	..	2	..	3
Foreign countries . . . . .	..	1	2	..	..	..	..	1	1	5
Religious profession, viz.—										
Church of England	128	13	64	14	41	1	5	16	18	300
Catholics	6	..	2	..	4	..	..	2	1	15
Dissenters	121	29	54	11	27	2	2	8	15	272
No profession	8	9	2	..	..	..	..	..	1	29

TABLE 8. DAY AND EVENING SCHOOLS.—Method of Instruction and Discipline professed to be pursued.

	Dame.	Common.		Superior.		Infant.		Charity.	Evening.
		Boys.	Girls.	Boys.	Girls.	Private.	Public.		
Out of a Total Number of . .	267	54	123	25	72	3	7	26	36
The scholars are classed in . .	4	23	58	13	52	2	7	24	9
The monitorial system is adopted in . .	..	1	..	..	1	3	7	19	..
The scholars are questioned systematically in what they learn in . .	4	6	15	16	35	2	7	13	3
Ditto, ditto, partially in . .	..	2	6	2	..	..	..	3	32
There are appointed visitors in . .	..	..	..	..	..	..	7	15	..
There are periodical examinations in . .	..	1	1	3	1	1	5	13	..
Maps and globes are used in . .	..	5	1	21	60	..	..	3	26
Maps only are used in . .	..	7	14	4	11	2	..	4	8
Pictures are used in . .	..	..	..	..	..	2	7	..	..
The Scriptures are used in . .	51	50	111	19	70	3	4	22	33
The Testament only is used in . .	127	..	8	2*	1	..	2	1	1
The Scriptures are not used in . .	85	1	2	4	..	..	1	3	..
There are without books . .	4	1	..	..	..	..	..	..	1
Prizes are given in . .	7	11	22	19	29	1	3	12	1
Corporal punishment is inflicted in . .	190	27	50	6	7	..	3	13	4
Corporal punishment is seldom inflicted in . .	3	4	16	5	4	..	13	6	12

With the exception of a very small number of schools, from which complete information on all these points has not been ascertained, it must be understood that, with regard to each method, a contrary system is adopted in the remaining schools.

* In one of these schools, only the New Testament in Greek is used.

TABLE 9. DAY AND EVENING SCHOOLS.—Libraries and Societies attached to Schools.

A Lending Library is attached to each of 5 superior boys' schools, 2 superior girls' schools, and 7 charity schools, containing 1,160 scholars. One charity school has a Lending Library and Savings' Bank, 1 has a Benefit Society, and 1 has a Benefit Society and Savings' Bank.

TABLE 10.—List of Schools supported wholly or in part by Endowment, Public Subscription or by Individuals, or attached to a place of Worship.

Number.	Schools.	Date of Establishment.	Number of Teachers.	Age.				Sex.		Total Number of Scholars.
				Under 5 years.	Between 5 and 15.	Above 15.	Between 7 and 14.	Boys.	Girls.	
DAY SCHOOLS.—INSTRUCTION GRATUITOUS.										
1	Free Grammar, New-st. .	1551	5	..	148	22	131	170	..	170
2	Blue Coat	1722	5	..	200	..	209	150	50	200
3	Crowley's Charity . . .	1733	1	..	10	..	10	..	10	10
4	Protestant Dissenting Charity, Park-st. .	1767	1	..	45	..	34	..	45	45
5	Poor House	1797	1	7	23	..	28	10	20	30
6	Asylum	1797	2	..	190	..	190	120	70	190
7	Elementary District, Gem- st.	1838	2	..	62	..	62	32	30	62
Total			17	7	678	22	655	482	225	707
Scholars attending the Lancasterian, St. George's, St. Mary's, and Gibb Heath schools, but who are taught with- out charge										
Total			17	7	678	22	655	482	225	731

TABLE 10.—List of Schools, &c.—*continued*.

Number.	Schools.	Date of Establishment.	Number of Teachers.	Age.				Sex.		Total.
				Under 5 years.	Between 5 and 15.	Above 15.	Between 7 and 14.	Boys.	Girls.	
INSTRUCTION NOT GRATUITOUS.										
8	St. Peter's	1799	2	7	151	2	134	90	70	160
9	Edgbaston Girls' . . .	1807	1	2	20	..	18	..	22	22
10	Lancasterian (Boys') Se- vern-st.	1809	1	..	150	..	110	150	..	150
11	Deaf and Dumb Asylum .	1812	4	..	50	3	44	27	26	53
12	National, Pinfold-st. . .	1812	3	6	318	..	233	220	104	324
13	New Lancasterian, Ann-st.	1813	1	3	133	..	103	..	136	136
14	Birmingham and Edg- baston Girls', Tennant-st. .	1816	1	..	73	..	62	..	73	73
15	Bordsley Charity . . .	1825	1	21	169	..	116	16	30	190
16	St. Mary's, Bath-st.. .	1831	2	13	88	..	52	55	46	101
17	St. John's School of In- dustry.	1833	1	..	30	..	30	..	30	30
18	New Jerusalem Church Charity	1833	1	..	180	..	144	180	..	180
19	Christ Church School of Industry	1833	2	..	135	..	118	..	135	135
20	St. Thomas's, Holloway- road	1834	2	5	210	..	156	150	65	215
21	St. Bartholomew's . . .	1834	2	7	140	..	97	94	53	147
22	Wesleyan Charity, Union Passage	1834	2	..	255	..	255	183	72	255
23	St. George's	1835	1	..	90	..	78	70	20	90
24	Ashed Charity.	1836	1	..	80	..	70	80	..	80
25	Gibb Heath Charity . .	1837	1	12	55	3	40	55	15	70
26	St. Chad's, Shadwell-st. .	Not ascer- tained.	2	10	203	..	133	104	109	213
Total . . . . .		..	31	86	2530	8	1993	1618	1006	2624
INFANT SCHOOLS—INSTRUC- TION NOT GRATUITOUS.										
27	Birmingham Infant School	1826	2	70	90	..	62	110	50	160
28	St. George's	1829	2	48	32	..	9	30	50	80
29	Edgbaston, Communica- tion-row	1829	2	25	75	..	16	75	25	100
30	St. Mary's, Shadwell-st. .	1831	1	52	58	..	7	50	60	110
31	St. John's, Deritend . .	1833	2	20	66	..	13	46	40	86
32	Wesleyan Union Passage.	1834	2	100	34	..	none	95	39	134
33	Asylum Infant School. .	Not ascer- tained.	1	34	31	..	7	36	29	65
Total . . . . .		..	12	349	386	..	114	442	293	735

In Nos. 1, 2, 3, 5, 6, and 7, religious instruction is given according to the principles of the Church of England, as also in Nos. 12, 15, 16, 17, 19, 20, 21, 23, 24, 28, 30, and 31, which are attached to Churches of the Establishment. In No. 4 the principles of religion are inculcated without reference to peculiar doctrines, as also in Nos. 10, 13, 14, 27, and 29, which are supported by public subscriptions. In Nos. 9, 11, and 25, which are also supported by public subscriptions, and in No. 33, which is supported out of the poor's rates, the tenets of the Church of England are taught. Nos. 8 and 26 are attached to Roman Catholic chapels, No. 18 to the New Jerusalem Church, and Nos. 22 and 32 to the Wesleyan chapel in Cherry-street.

TABLE 11. SUNDAY SCHOOLS.—Summary of Sunday Schools, and of Scholars on the Books and in Average Attendance.

Religious Denominations.	Number of Schools.	Scholars.					Average Attendance.	Per Centage of Average Attendance on the Books.	Average Number of Scholars in Attendance to a School.	
		Age.		Above Fifteen.	Sex.					Total Number on the Books.
		Under Five Years.	Between Five and Fifteen.		Boys.	Girls.				
Church Establishment	15	59	3,927	579	2,421	2,144	4,565	73.3	223	
Wesleyan	9	•	3,317	592	2,006	1,903	3,909	68.7	298	
Independent	6	•	1,625	370	1,073	922	1,995	77.4	257	
Baptist	5	•	1,652	322	1,063	911	1,974	72.3	285	
Unitarian	3	10	1,261	278	1,171	378	1,549	77.9	241	
Wesleyan Association	4	•	218	•	97	121	218	70.2	48	
Roman Catholic	2	8	301	29	160	178	338	70.4	119	
New Connexion Methodist	2	•	332	12	199	145	344	66.7	125	
Primitive Methodist	2	•	225	•	120	105	225	71.1	80	
New Jerusalem Church	1	•	301	29	224	106	330	66.6	220	
General Baptist	1	1	268	26	135	160	295	74.6	220	
*Calvinist	1	•	519	41	400	160	560	78.6	440	
Friendly Methodist	1	•	119	11	60	70	130	69.2	90	
†Baptist and Independent jointly	1	•	91	12	60	43	103	77.6	80	
*Christian Union	1	40	164	18	95	127	222	81.1	180	
Total	56	118	14,320	2,319	9,284	7,473	16,757	72.8	218	

* Lady Huntingdon's Connexion.

† Supported by the union of these two denominations.

‡ Lately originated by the exertions of a few benevolent individuals of different religious denominations for the instruction of the more destitute juvenile population, who are prevented from attending other Sunday schools for want of decent clothing.

Although a few of these schools are held in school-rooms belonging to charity day-schools, they cannot be regarded as attached to the Charity schools. The Sunday schools consist of different scholars in a great measure, the universal rule in the Charity day-schools being to require the scholars to attend a Sunday school, the choice of which is left to the parents.

TABLE 12. SUNDAY SCHOOLS.—Date of establishment.

	Schools.		Scholars.
In or before 1800	6	with	2,756
1801 to 1810	6	,,	1,610
1811 to 1820	13	,,	4,340
1821 to 1830	15	,,	4,988
Since 1830	15	,,	2,773
Not ascertained	1	,,	340
Total	56		16,757

TABLE 13. SUNDAY SCHOOLS.—Size of Schools.

Number of Scholars.	Schools.	Scholars.
On the Books.		
Not exceeding 100	11	617
From 100 to 250	17	2,937
From 250 to 500	15	5,000
Above 500	13	8,203
Total	56	16,757
Average Attendance.		
Not exceeding 100	18	1,093
From 100 to 250	20	3,597
From 250 to 500	15	5,947
Above 500	3	1,587
Total	56	12,224

TABLE 14. SUNDAY SCHOOLS.—Number of Scholars to a Teacher.

Denominations.	Schools.	Teachers.	Scholars on the Books.	Average Number of Scholars to a Teacher.
Established Church	15	435	4,565	10·5
Catholic	2	9	338	37·5
Independent	6	229	1,995	8·7
Wesleyan	9	571	3,909	6·8
Baptist	5	332	1,974	5·9
Unitarian	5	245	1,549	6·3
Other Sects	14	308	2,427	7·8
Total	56	2,129	16,757	7·8

NOTE.—It must be borne in mind that in many schools the teachers attend only half the day, in which cases the number of scholars to a teacher will be double the amount above stated.

TABLE 15. SUNDAY SCHOOLS.—Employment of School Hours.

The time occupied in devotional exercises and instruction is 3 hours in 5 schools, from 3 to 4 hours in 21, from 4 to 5 hours in 14, and above 5 hours in 16. In nearly all the schools some time is occupied in prayer and singing, and in the majority of them from 10 to 20 minutes are devoted to an address delivered by a teacher.

TABLE 16. SUNDAY SCHOOLS.—Subjects Taught.

Subjects.	Number of Schools.	Number of Scholars.	
		On the Books.	Average Attendance.
Total number of schools . . .	56	16,757	12,224
Reading	56	16,757	12,224
Writing	25	7,329	5,355
Arithmetic	7	2,067	1,555
Grammar	4	1,577	1,227
Geography	5	2,124	1,642
History	4	1,577	1,227

NOTE.—This table refers only to subjects taught on the Sabbath. In several of the schools reading is attended to merely as an appropriate medium of imparting religious instruction. Of the schools in which arithmetic is taught, 2 are Unitarian, 1 is Catholic, and 1 is connected with the New Jerusalem Church. In one of the Catholic schools the Latin language also is taught to a few scholars.

TABLE 17. SUNDAY SCHOOLS.—General Mode of Conduct and Discipline.

Five schools attached to the Church of England, 2 Roman Catholic, and 2 Dissenters' schools, are conducted partly by paid, and partly by gratuitous, teachers. Ten schools attached to the Church of England and 37 Dissenters' schools are entirely conducted by gratuitous teachers.

In 34, out of 56 schools, there are appointed visitors.

Examinations are held yearly in 12 schools, half-yearly in 3, quarterly in 10, monthly in 8, and occasionally in 1. In the remaining 22 schools there is no periodical examination.

The monitorial system is followed wholly in 4, partially in 1, and is not followed in the remaining 51 schools.

In 53 schools, the children are questioned upon what they read and learn, and in 3 they are not so questioned.

In 8 schools, corporal punishment is inflicted; in 5, punishment consists of public exposure; in 6, extra lessons are imposed as a punishment; and in the remaining 37, punishments are not professedly resorted to.

In 37 schools, prizes are given, and in 19 they are not given.

TABLE 18. SUNDAY SCHOOLS.—Libraries and Societies attached to Schools.

	Schools.	Scholars on the Books.
With a lending library	4	1,505
„ benefit society	3	334
„ savings' fund	3	359
„ lending library and clothing society	2	604
„ „ and benefit society	8	3,922
„ „ and savings' fund	4	1,350
„ benefit society „	1	295
„ lending library, clothing and benefit society .	3	1,162
„ „ clothing society and savings' fund	1	252
„ „ benefit society and savings' fund	7	3,455
„ „ clothing and benefit society and savings' fund . . .	5	1,867
Without a lending library or any society	15	1,652
Total	56	16,757

TABLE 19. EVENING SCHOOLS ATTACHED TO SUNDAY SCHOOLS.—Summary of Schools and Scholars and Date of Establishment.

Religious Denomination.	Schools.	Scholars.		
		Males.	Females.	Total.
Established Church	6	264	118	382
Wesleyan	5	78	233	311
Independent	4	226	158	384
Baptist	2	105	115	220
Calvinist	1	18	25	43
New Jerusalem Church	1	50	40	90
Unitarian	1	20	..	20
Christian Union	1	20	20	40
Total	21	781	709	1,490

Religious Denomination.	Date of Establishment.				
	Before 1800.	1801 to 1810.	1811 to 1820.	1821 to 1830.	Since 1830.
Established Church	1	1	1	2	1
Wesleyan . . . . .	..	..	..	2	3
Independent . . . . .	..	..	2	1	1
Baptist . . . . .	..	..	1	..	1
Calvinist . . . . .	..	1	..	..	..
New Jerusalem Church . . . . .	..	..	..	1	..
Unitarian . . . . .	..	..	..	..	1
Christian Union . . . . .	..	..	..	..	1
Total	1	2	4	6	8

NOTE.—The majority of these schools are only open one evening during the week.

Reading, writing and arithmetic are taught in the Unitarian school; writing in 2 Wesleyan, 1 Independent, and 1 Christian Union school; writing and arithmetic in 4 schools of the Established Church, in 1 Wesleyan, 2 Independent, 1 Baptist, 1 Calvinist, and 1 New Jerusalem Church schools; the same with sewing and knitting in 1 Established Church school and 2 Wesleyan schools; the same with grammar in 1 Baptist school; writing, arithmetic, with grammar, in one Independent school; and with geography in 1 school of the Established Church. In one of the latter schools an additional hour is devoted to needlework.

In 2 of the Wesleyan schools the attendance is 1 hour; in 2 Wesleyan and 2 Independent schools it is $1\frac{1}{2}$ hour; in the New Jerusalem Church school the attendance was not ascertained, and in all the remaining schools it is 2 hours.

In 1 school of the Established Church 1*d.* entrance and 1*d.* per month are charged; in 1 Wesleyan school 1*d.* per week; and in the New Jerusalem Church school $\frac{1}{2}$ *d.* per week is charged during the winter months. In all the rest no charge is made.

One school of the Established Church, 1 Wesleyan, 1 Baptist, and 2 Independent schools, are conducted by a paid teacher.

General Summary of Schools and Scholars in the Borough of Birmingham, with an estimated Population of 180,000, in the Year 1838.

DESCRIPTION OF SCHOOLS.	Number of Schools.	Scholars.					Per Centage.			
		Age.		Above 15.	Sex.		Total.	Of the whole Popula- tion.	Of the whole Number of Scholars.	Of the whole Number of Sunday Scholars.
		Under 5.	Between 5 and 15.		Males.	Females.				
Sunday Schools:— Church of England	15	59	3,927	579	2,421	2,144	4,565	2.54	16.50	27.34
Roman Catholic	2	8	301	29	160	178	338	0.18	1.92	2.02
Dissenters.	39	51	10,092	1,711	6,763	5,151	11,854	6.59	42.86	70.74
	56	118	14,320	2,319	9,284	7,473	16,757	9.31	60.58	100.00
Per centage according to age and sex. . . . .	..	0.71	85.46	13.83	55.43	44.57				Per cent- age of the whole num- ber of day scholars.
Returned also as day or evening scholars . . . . .	..	..	..	..	..	..	4,141	2.30	14.97	
Receiving Sunday-school instruction only . . . . .	..	..	..	..	..	..	12,615	7.01	45.61	
Infant schools (private).	3	41	97	..	29	39	68	0.04	0.24	0.47
Dame schools	267	1,726	2,174	..	1,829	2,071	3,900	2.17	14.10	26.93
Common day schools	177	595	3,648	37	2,007	2,273	4,280	2.37	15.47	29.56
Superior private and boarding schools	97	114	1,901	151	989	1,177	2,165	1.20	7.84	14.96
Supported solely by the scholars	544	2,476	7,750	184	4,854	5,560	10,414	5.78	37.65	71.92
Infant schools assisted by the public	7	249	385	..	442	293	735	0.41	2.66	5.08
Charity and endowed schools	26	93	3,208	30	2,100	1,231	3,331	1.85	12.04	23.00
Total	577	2,918	11,344	218	7,396	7,084	14,480	8.04	52.35	100.00
Per centage according to age and sex. . . . .	..	20.15	78.34	1.51	51.07	48.93				
Evening schools, supported by the scholars.	36	..	301	262	367	196	563	0.31	2.04	3.36
Total number of schools and scholars.	659	..	..	..	..	..	27,659	15.36	100.00	
Evening schools attached to Sunday-schools.	21	..	932	553	781	709	1,490			

Statistics of the Parish of St. George the Martyr, Southwark. By the
REV. GEORGE WEIGHT, F.R.A.S., F.S.S.

[*Read before the Statistical Society of London, 20th January, 1840.*]

THE parish, of which I have attempted to give a brief description in the following paper, contains more to stimulate the curiosity of the statistician and the antiquarian than to gratify it. After the most diligent inquiry, I cannot find a separate map of the parish, nor is it known that any ever existed. The parish is divided from the surrounding district by narrow ditches, which are in many parts concealed or covered by roads and buildings, and which, as the bounds are only beaten at intervals of seven or eight years, may at some future period be obliterated or forgotten, and become a fruitful source of dispute and litigation. It appears scarcely credible that such a state of things should exist in a parish containing 50,000 people, and where the ground yet uncovered with buildings has become exceedingly valuable. A respectable inhabitant has recorded, in a pamphlet upon the charities of this parish, the following very singular transaction; which, if true, reflects no great credit on the office-bearers of the year, who, as the writer says, "deserve to be immortalized" for their acquiescence in so singular a business. "At a public vestry, holden about 1776, the following motion was proposed and passed, viz., to sell to Mr. S—— C—— all the parish papers and documents in a lump, at the rate of three halfpence per pound, he being at the expense of carrying them away."

This parish was originally given by William the Conqueror, soon after the year 1066, to the noble family of Arderne. It was for some time attached to the priory of Bermondsey, having been given to that foundation by Thomas Arderne, and Thomas his son, in 1122. This abbey or priory of Black Monks of St. Saviour, "called Bermonds Eye, in Southwarke," was situated at the south end of Bermondsey-street, and was founded in the year 1081. St. George's continued to be under the control of the Black Monks, until the extermination of the monasteries in the reign of Henry the Eighth.

The parish is exceedingly irregular in its form, and, in the absence of maps and measurement, it is almost impossible to estimate its extent or its area. The only thing with which I can compare it as to shape is the stoppered retort of the chemist. In the larger, or chamber, part, it is on an average about half a mile broad, and in its greatest measurement about a mile and three quarters long. The whole length of foot-way, taking in every street, lane, court, &c., is 14 miles, 1 furlong, 31 poles, and 15 yards. The parish is bounded on the north by St. Saviour's, on the east by Bermondsey, on the south by Newington and Camberwell, and on the west by Newington and Lambeth. It contains, at the present time, 2 squares, 109 streets and roads, and 123 courts and alleys. The total number of houses is 6,854, and the character of

NOTE.—I cannot put forth this statement without acknowledging with cordial thanks the prompt assistance which I have received from Rawson W. Rawson, Esq., one of the Honorary Secretaries of the Statistical Society of London, not only in suggesting sources of information, but in arranging the materials which I had collected, and in furnishing me with some of the numerical comparisons contained in the paper.

the parish may be estimated from the facts that although all these houses are rated, yet separate assessments are made on only 3,762 of them. The remaining 3,092 are "farmed" out, *i. e.*, a composition is paid for them by the landlords, who let them to weekly tenants, the composition being paid, whether the house is let or not. Thus, in 1832, there were 6,036 houses, and out of these 2,903 were farmed by 265 persons: and at the present time there is a street leading out of Kent-street which contains 91 houses, all of which are the property of one landlord, and are assessed in one sum. The character of the dwellings is further exhibited by the rates of assessment. The following table shows that out of 3,762 houses which are separately rated, only 309, or 8 per cent., are rated at a rental of more than 50*l.* a-year.

Rated at a rental of £10 per annum and under				No.
Under	20	and above	£10	1,427
"	30	"	20	642
"	40	"	30	437
"	50	"	40	232
"	60	"	50	88
"	70	"	60	68
"	80	"	70	49
Above	80	.	.	104
				<hr/> 3,762 <hr/>

A better judgment of these results may be formed by comparing them with similar data respecting two opulent parishes in another part of London. In St. Marylebone, at the close of 1831, the proportion of houses rated above 50*l.* was 35 per cent.; and in St. George's, Hanover Square, in 1838, it amounted to 43 per cent. The details are as follows:—

				St. Mary- lebone. Christmas, 1831.	St. George's, Hanover-sq. 1838.
Number of houses	rated under	£10 per annum		964	
"	"	from 11 to £20	.	2,077	1,674
"	"	" 21 to 50	.	5,010	2,114
"	"	" 51 to 100	.	2,614	1,306
"	"	" 100 to 200	.	1,262	..
"	"	" 100 to 300	.	..	1,191
"	"	above 200	.	516	..
"	"	" 300	.	..	356
				<hr/> 12,443 <hr/>	<hr/> 6,641 <hr/>

The total number of houses in 1831 was 6,607, and the population 39,769. The latter is at present estimated by persons who have been long connected with the parish at from 45,000 to 50,000; I am inclined to believe that the latter is the more correct approximation to the real number.

The following returns of the number of rated houses and of the population at several periods, which I have derived from various sources, are interesting; and as every house was separately rated until the year 1809, they will show very satisfactorily the progressive increase of the parish. In 1620 there were 134 acres of land in the parish which was not built

upon. Of these, $106\frac{1}{4}$ acres were common land, and free for pasturage to all Southwark; the remaining $27\frac{3}{4}$ acres were inclosed as garden-ground, &c. In 1759 there were 100 acres of common land, and at that time the buildings had not extended beyond Stone's End. In 1651 there were 306 rated houses in the parish. During the next 50 years the number increased but slightly, as in 1697 there were only 409 houses, but in the ensuing 20 years the number was nearly quadrupled, having risen in the year 1722 to 1503. In 1798 there were 2,383 rated houses; and in 1801, when the first census was taken, there were 3,964, with a population of 22,293.* The subsequent enumerations have been as follows:—

			Rated Houses.			Population.		
1807	.	.	4,161	.	.	24,043		
1811	.	.	..	.	.	27,967		
1821	.	.	..	.	.	36,368		
1831	.	.	3,398	.	.	39,769		

The information given in the census of 1831 affords a very full view of the state of the parish at that time, and furnishes the means of an interesting comparison with the adjoining parishes, and with some of the more wealthy parishes at the west end of the metropolis. The number of inhabited houses was 6,036, of which 3,398 were rated. There were 571 uninhabited, and 70 in the progress of erection. The population consisted of 18,891 males and 20,878 females. The excess of the latter amounts to $10\frac{1}{2}$ per cent., which is somewhat greater than in the remainder of the borough of Southwark, but one-third less than in the part of London north of the Thames, where it amounts to nearly 16 per cent.† This, as will presently appear, is partly owing to the difference in the number of female servants in the two districts under comparison.

The number of males 20 years of age was 8,467, or $44\cdot8$ of the whole number of males, which is a remarkably small proportion, indeed so much less than that exhibited by the other parishes in Southwark, and by the other part of London already referred to, as to indicate either an error in the returns, or the existence in this parish of some unusual circumstances permanently, or at that period temporarily, disturbing the customary proportions of the male population. In the other parishes of Southwark the proportion was 58 per cent. and in London north of the Thames, 57 per cent. Any great excess of schools, or of educational charities in the parish, might account in some degree for this difference; but it will be shown, in another part of this paper, that such an excess does not exist. The number of families was 9,183, of which 5,019 were chiefly employed in trade, manufactures, and handicraft, 42 in agriculture, and 4,122 in other occupations. The latter class includes the gentry and other independent ranks of society, and is in

* The great increase of buildings noted in the census of 1801 may be partly accounted for by the following fact. About forty years ago, a gentleman, who rented a large area of land in the neighbourhood of the present Surrey Theatre, engaged, under a bond of £1000, not to build a single tenement on any part of the ground of which he was tenant. As soon as this bond was executed, he paid the fine of £1000, and covered the entire space with buildings, which are understood to have become very profitable.

† Viz., in the Ossulston hundred of the county of Middlesex, London within and without the Walls, and Westminster, where the males amount to 588,706, and the females to 682,308.

proportion tolerably large. Compared, however, with the surrounding parishes it is very small. In Christchurch, the latter class is in excess, and in St. Olave's and St. Thomas it is double the class of traders, and in St. John's, Horsleydown, it is nearly three times as numerous. It does not appear from the returns what causes this great excess: it cannot arise from the number of gentry, but is probably owing to the number of watermen, bargemen, and labourers, who are not included under the other heads. There are but few parishes in London in which this excess occurs, and in these it is obviously owing to the number of gentry congregated within them, viz., Marylebone, St. George's, Hanover Square, and St. John and St. Margaret in Westminster. The number of persons employed in manufactures, or in making machinery for manufactures, was very small, only 76. The number in retail trade or in handicraft as masters or workmen was 3,877; and of labourers employed in work not agricultural, 1,630.

The next head affords strong evidence as to the character of the population; the number of capitalists, bankers, professional and other educated men, amounted to 849, or one in 10 of the males 20 years of age. In each of the parishes of St. Marylebone, St. George's, Hanover Square, and St. James's, Westminster, this proportion was 1 in 6; on the other hand, in St. Giles's, it was 1 in 12. In the adjoining parish of Christchurch it was 1 in $7\frac{1}{2}$. Further evidence upon the same point may be derived from the number and description of servants. In this parish there were 655 male servants; there was, therefore, on an average, only 1 male servant to 14 families, whereas, in the whole of Westminster, there was 1 to 5; in St. James's 1 to 4; and in St. George's, Hanover Square, nearly 1 to 2 families. An equal contrast is observable in the age of the men-servants. In St. George's, Southwark, 321, or nearly one-half, were below 20 years of age, but in the whole of Westminster only one-fifth, and in St. George's, Hanover Square, one-ninth were below that age.* The number of female servants in the parish of St. George's, Southwark, was equally small; it amounted to 1,216, or 1 servant to $7\frac{1}{2}$ families, while in Westminster there was 1 to $2\frac{1}{2}$ families, and in St. George's, Hanover Square, 5 servants to 6 families, or nearly 1 servant to each family. In Westminster the female servants constituted exactly one-tenth of the whole population, but in St. George's, Southwark, only one thirty-third part. This parish abounds with asylums of various kinds; and in 1831, 2,321 persons were inmates of such establishments.†

* It may here be remarked, that there was a great difference in the proportionate number of male servants in St. Marylebone and St. George's, Hanover-square; in the latter there was one servant to two families, whereas in the former there was less than one to five.

† Of these there were—in the King's Bench Prison, 404 males and 35 females; in the Marshalsea, 130 m. and 10 f.; in the House of Occupation connected with Bridewell, 38 m. and 35 f.; in the Philanthropic Society, 113 m. and 47 f.; in the Blind School, 53 m. and 71 f.; in Bethlem Hospital, 130 m. and 152 f.; in St. Peter's Hospital, 7 m. and 19 f.; in the Drapers' Almshouses, 13 f.; in Rowland Hill's Almshouses, 25 f.; in Hedger's Almshouses, 9 f.; in the Freemasons' School, 64 f.; in the Deaf and Dumb Asylum, 145 m. and 115 f.; in St. George's Work-house, 148 m. and 216 f.; in the Southwark Poor-house, 15 m. and 114 f.; in the Lombard-street (Mint) Poor-house, 114 m. and 99 f.—Total, 1,297 males and 1,024 females.

In 1722 the parish had "a select vestry, 2 churchwardens and 4 overseers of the poor;" it is now governed by a vestry open to all rate-payers. With regard to the Poor Laws, it constitutes a single parish under a board of guardians. In 1651 the expenditure for the relief of the poor was 141*l.* 10*s.* 1*d.*; in the year ended 31st March, 1838, it amounted to 9,726*l.*, and the total parochial rates expended to 15,532*l.* In the same year the number of persons receiving parochial relief was 439 within the workhouse, and 793 out-door paupers; total 1,232.

The oldest parish records are the minutes of vestry dated 1560; the oldest register of births, marriages, and deaths, commences in March, 1602. From the latter document I have prepared the following table of the number of baptisms, marriages, and burials, at various periods up to the last year, which indicate in some degree the progress of the population. I have also noted certain years in which there occurred a great excess of mortality. The first case of Asiatic cholera in London is supposed to have occurred in a wretched part of this parish called the Mint, which will presently be described, and that disease caused great mortality in the parish during the year 1832.

	Baptised.	Married.	Buried.	
1602	181	157	215	
1603	..	187	928	Year of the plague.
1620	208	202	296	
1625	..	183	1,464	Year of the plague.
1624	..	..	435	
1636	..	163	980	Year of the plague.
1640	210	186	261	
1660	67	222	179	
1665	105	333	1,413	Year of the plague.
1666	155	483	134	Fire of London.
1667	138	379	214	
1680	222	332	377	
1700	282	28	396	
1720	208	59	483	
1740	198	25	424	
1760	211	70	307	
1780	230	100	359	
1800	534	206	573	
1810	636	262	705	
1820	621	236	709	
1830	677	256	828	
1831	..	..	925	
1832	..	..	1,133	Year of the cholera.
1833	..	..	945	Year of the influenza.
1834	..	..	738	
1839	638	328	503	

In looking over some accounts of the several plagues which ravaged London in the 17th century, I was tempted to inquire to what extent those dreadful visitations were felt in this parish. I subjoin the results for the several years. In 1603, when 30,578 persons died in London, the burials in this parish increased from less than 300* to 928. 73 are stated to have died of the plague, but on the 21st July the writer has

* From March to December they amounted to 215.

suddenly ceased his entries of this distemper, and does not once again mention it. I suppose that the parish officers were terrified, and interfered. This appears to have been a year of dreadful mortality in the three prisons then existing in the parish and in the Mint. In 1623, when 35,000 died of the plague in London, the burials rose from 435, the number in 1624, to 1,464; of those buried in this year, 101 were persons confined in the three prisons. In 1636, when 10,400 died of the same disease in London, 980 persons were buried in this parish. In 1665, the year of the great plague, when Defoe estimates the number of deaths at 70,000, 1,413 persons were buried in this parish, 105 were baptised, and 333 couples were married. The number of marriages is surprisingly large for so calamitous a year; but it must be remarked, that during the months of August and September, in which by far the largest number of deaths occurred, not a single wedding took place. Defoe reckons eight parishes in Southwark, of which Bermondsey was one, but it suffered less than any of the others. In the whole of Southwark there died of the plague in that year,

Up to 1st July	2
From 1st July to 18th July	35
„ 25th July to 1st August	205
„ 12th Sept. to 19th Sept.	1,636
„ 19th „ 26th „	1,390
„ 26th „ 3d October	1,201

In 1666, the year of the Great Fire, the number of baptisms and burials was very small, the former being only 155, and the latter 134, but the number of marriages was very large, having amounted to 483.

I will now proceed to describe the principal features of the parish, some of which are, under any circumstances, well worthy of notice.

There is a large section of this parish called the Mint, which is now engaging some degree of public attention in London, in consequence of having been the scene of “the life, character, and behaviour” of the notorious Jack Shepherd. His companion, the well known Jonathan Wild, kept his horses at the Duke’s Head (still standing) in Red-Cross street, within the precincts of the Mint. This district, formerly called “Suffolk Manor,” contains about 17 acres. In 1697 it contained 92 houses; and in 1830, 1,712. Opposite to St. George’s church, where the premises of Mr. Pigeon the Distiller now stand, was formerly Suffolk House, a mansion belonging to Charles Brandon, Duke of Suffolk, the brother-in-law of Henry VIII. The duke died in 1545, and the palace then fell into the hands of the King, who converted it into a Royal mint. It was then called Southwark Place, and sometimes Duke’s Place. Edward VI., in 1549, came from Hampton Court to visit the Mint; it was then spoken of as the “Capital messuage, gardens, and park, in Southwark, and the gardens, curtilages, and lands, to the said mansion-house, gardens, and park belonging.” Queen Mary gave the Mint to the Archbishop of York, in recompense for York House, Westminster, which had been taken from Cardinal Wolsey by Henry VIII. The archbishop sold it in 1557, when it was pulled down, and a great number of mean dwellings were erected on its site. The interior of the Mint (it was, at that time, protected by gates at all its principal entrances) became at length an “Alsatia,” surpassing in

its bad pre-eminence the famous district in Whitefriars, of which Sir Walter Scott in his "Fortunes of Nigel" has given so graphic and vivid a description. It was an asylum for debtors, coiners, and vagabonds, of all orders and degrees. In the time of Edward VI., we read of the "traitors, felons, fugitives, outlaws, condemned persons, convict persons, felons defamed, those put in exigent of outlawry, felons of themselves, and such as refuse the law of the land," herding in St. George's and the neighbouring parishes. It became at length such a pest, that statutes in the 8th and 9th years of William III., and 9th and 11th of George I., ordered the abolition of its *privileges*! The evil, however, was too deeply rooted to be easily exterminated.

"At genus immortale manet, multosque per annos
Stat fortuna domûs, et avi numerantur avorum."

Some parts of the Mint are still exceedingly filthy and wretched, and inhabited by an indigent and profligate population.

The Mint is remarkable for the number of its lodging-houses. Of the 11 which exist in the parish there are 9 in this district, sheltering, on an average, in winter 70 persons in each house, and in summer about 30. In the latter case the persons who usually live in these places are absent in the country, harvesting, hop-picking, &c. The regular charge is 4*d.* each for a single bed, for the 24 hours, and 3*d.* each, if two sleep in a bed, for which sum they are supplied with a general sitting room, fire, candle, cooking apparatus, &c. The houses are open from 5 in the morning until 12 at night. In general two persons sleep in each bed, and all are required to rise by 10 in the morning at the latest.* There are about 7 beds in a room, which are well supplied with blankets and coverlets. The arrangements are altogether much more comfortable than might be expected for so small a sum. To prevent *mistakes* being made by the lodgers as to the *meum* and *tuum*, the blankets are all stamped in several places with the name and address of the owners. Married people have a room from which unmarried persons are excluded. Single women are (professedly) not admitted. All pay daily, or many would never pay at all. The men generally work at the wharfs by the river side, but many of them are pedlars, sailors, cabmen, labourers, &c. Some have been lodging in these houses from 4 to 8 years. I found among the whole of this lodging-house population three members of temperance societies. One house takes in the Weekly Dispatch, for one hour on Sunday. I found among them all 14 bibles and 10 testaments. There is preaching in 4 or 5 of the houses every Sunday, and, having been once or twice present, I can state that the service is most orderly and regular, and exceedingly well attended.†

The following Table contains an account of the number of houses, families, and children in the Mint, distinguishing that part which belongs to the parish of St. George, in December, 1830.

* It has been stated, that in similar houses, in other parts of the town, the beds or hammocks are let to drop down at this hour, so that the occupants are obliged to rise.

† For several particulars relating to the parish, and to the Mint in particular, I desire to acknowledge my obligations to the politeness of Wm. Griffith, Esq., of Lant-street, Southwark.

Locality.	Houses.	Families.	Children.
IN THE PARISH.			
Southwark Bridge-road	40	58	75
Red Cross-street	65	102	142
High-street (west side) with seven courts	261	382	716
Mint-street and its courts	248	535	772
Blackman-street and courts	83	125	176
Lant-street and courts	237	422	587
Great Suffolk-street and courts	299	519	1,041
Total in the parish	1,233	2,143	3,509
Total out of the parish	479	1,056	1,054
Total	1,712	3,199	4,563

Kent Street, like the Mint, is another of the wretched and profligate parts of the parish. It was originally called Kentish-street, as it formed the great road into the county of Kent. In 1633, it was described as "very long and ill built, chiefly inhabited by broom-men and mumpers." To these may now be added, thieves, low prostitutes, and bad characters of all descriptions. It has, however, been much improved within the last 20 years. For ages past it has been famous for its turners' shops, and its extensive broom and heath yards.

St. George's Fields formed a very extensive part of the parish, but their exact boundaries are now unknown. There is no doubt that these fields formed the centre of several Roman roads; one of these, Ermyu Street (Hermin, Ermine, &c.), ran from Bankside, opposite Dowgate, along, or very nearly in the direction of, the present Stoney-street and Red-Cross-street, to St. George's Fields, and nearly parallel with the present Clapham Road, as far as Noviomagus (Woodstock) in Surrey. Traces of it are yet to be seen near Ockley in that county. Pennant conjectures that the Romans had a summer camp in these fields. He considers that it was too wet for a winter, or a permanent station.*

There formerly existed four Prisons in this parish, all of which were long established, but at present there are only two.

1. The White Lion, on St. Margaret's Hill (which is now called High Street), near St. George's Church. This prison was originally the county gaol for Surrey; it was removed to Horsemonger Lane, which is now the county prison, at the suggestion of Howard the Philanthropist. It was called the White Lion, because built on the site of an inn so named.

2. The Marshalsea; so called from having been originally placed under the control of the Knight Marshal of the Royal household. It was instituted for determining the causes of the King's menial servants. Its jurisdiction extends 12 miles round Whitehall, the city of London excepted. Persons confined there are pirates and debtors. It contains 60 rooms and a chapel. This prison originally stood near King Street, on the site of the extensive premises now occupied by Messrs. Gainsford and Co. The date of its erection is unknown.

* That the Romans did much frequent St. George's Fields is evident from the large quantities of remains which have been found there, as well as in other parts of the parish, consisting of coins, bricks, an urn full of bones, tessellated pavements, &c.

3. The King's Bench originally stood near the spot occupied by the present Marshalsea; its exact situation was on the premises now belonging to Mr. Young in Layton's Buildings, High Street. It was originally, as it now is, a place of confinement for debtors. The date of its erection is unknown, but, in 1579, the persons confined there, in consequence of a contagious disorder breaking out, petitioned government that the prison might be enlarged, and that they might have a chapel erected, for the performance of Divine service.

The Bench is surrounded by a very lofty wall; it contains 224 rooms, each about 15 ft. by 13 ft. in size; 8 of these are called state-rooms, and are, or were, let for 2s. 6d. per week each, unfurnished. There are several shops, and a tolerably good market, within the walls. 500 persons have been confined here at one time, but it is now nearly empty. Debtors pay, for the privilege of the rules, 10 guineas for the first 100l. and 5 guineas for each succeeding 100l. for which they are in custody. Liberty to go out of the prison may be purchased for 3 days, at the rate of 4s. 2d. for the first day, 3s. 10d. for the second, and 3s. 10d. for the third. These days must be specified on the liberty ticket. Of course good security is given to the marshal that the prisoners will not decamp. It was stated by the Parliamentary Committee in 1813, that the emoluments of the marshal of this prison amounted to 3,590l. a year, of which 872l. arose from the sale of beer, and 2,823l. from the rules.*

4. The Counter. This was also a prison for debt, and was attached to the Marshalsea. It is now no longer connected with St. George's parish, having been removed to Tooley-street, Southwark.

The Lock Hospital was once a building of considerable importance in the parish. It was originally described as "the Loke, or Le Loke's Lazar House," "beyond St. George's Bar, in Southwarke;" it stood at the end of "Kentish-street," near the spot where Kent-street and the Great Dover-road now unite. Edward III., about 1347, ordered that within 15 days all lepers should depart from the city "into some out-places in the fields." In consequence of this mandate, 4 lazar houses were built, of which this was one. In 1437, John Pope gave to "the Leprous House Le Loke's," the annual sum of 6s. 8d. out of his estate. In 1598 it was still a lazar house. It subsequently became a hospital for persons afflicted with the venereal disease. There was another house for the same purpose at Kingsland; and both were connected with St. Bartholomew's Hospital. The famous Dr. Ratcliffe left to these charities 400l. a year "to mend their diet," and 100l. a year "to purchase linen." The Lock was pulled down about 40 years ago. The name is still retained in the parish, attached to a pauper burial-ground near the spot.

Southwark Fair, which was established in the fourth year of Edward VI., once possessed great notoriety. Hogarth, in his plate of this fair, represents Figg, a celebrated prize-fighter, and a worthy named Cadman, flying by means of a rope from the tower of St. George's Church. In September, 1743, this fair continued three days. It was held in part of the Mint, and became so dangerous a nuisance that in 1763 it was altogether suppressed. The booth-keepers were accustomed to collect money at their stalls for the prisoners in the Marshalsea.

It is greatly to be regretted that the existing provisions in the parish

* It was here that Henry, Prince of Wales, afterwards Henry V., was confined by Judge Gascoigne for striking him when on the Bench.

for the religious and intellectual instruction of the population are wholly inadequate to remove, or even to check, the amount of misery and vice which prevails in a large portion of the district. With regard to the state of public worship, it has already been stated that the population amounted in 1831 to 39,769, and is now estimated at 45,000 to 50,000. For the religious accommodation of this number there are only six churches and chapels, and one school-room, connected with the Church of England; but of these, two chapels are connected with charitable institutions, and two belong to prisons, so that only a portion of these four chapels are available to the parishioners. One of these is the Magdalen Chapel, in which there are no free sittings; and those who have attended service there must have observed, that a considerable part of the congregation, exclusive of the objects of the charity, are not connected with the parish. Including, however, all these chapels there are only 4,978 sittings, of which 1,558 are free. There are 11 services on the sabbath, and 3 in the week days. The number of clergymen connected with the parish is 11.

But on these details a few observations are requisite. The parish church has, at present, three services on Sunday, and one in the week. Three years ago it had only two in the whole week. The weekly service was commenced about 12 months since. It has four clergymen; a rector, two curates, and an evening lecturer. The latter appointment has only existed about three years. The rector takes very little of the surplice duty; the lecturer lives at a considerable distance, and is not expected to take any. He takes, however, the weekly service at the parochial school-room. The seven remaining clergymen have no connexion with the duties of the parish, their services being entirely confined to their respective chapels; so that there are in fact only three clergymen to attend to the whole of this large parish. Some idea may be formed of the extent of surplice duty, from the following statement. In the year ending December 11th, 1838, there were, at the parish church, 265 marriages, 280 churchings, 633 baptisms, 564 funerals. In the following year there were, 328 marriages, 638 baptisms, 503 funerals, which give an average of nearly 5 services daily.

The total number of births registered in the parish during 1839 was 1,574, of marriages, 310, and of deaths, 1,200.

The rector and curates, in addition to the morning and afternoon services on Sundays, and the service on Wednesday evening, have therefore to attend to all the surplice duty of the parish, and to visit the sick. This last duty, in a parish so large and populous, and withal so necessitous, and consequently unhealthy, is frequently a very serious labour.

The various denominations of dissenters furnish the following accommodation: 20 chapels, served by 14 ministers, and containing 7,604 sittings, of which 2,728 are free. There are 35 services on Sunday, and 34 on week-days.

The synagogues ought to have 2 services daily; but as they find it difficult to collect the requisite number of persons (10 above the age of 13), they meet but seldom. The services at the Roman Catholic chapel are on Sundays at 8, 9, 10, and 11 o'clock. I have marked them as 4 services, although, as the doors in the intervals are not closed, perhaps I ought rather to have called them one. The week-day services are at 8, 9, and 10 o'clock daily.

I have spoken of the room at the parish workhouse, as a chapel.

There is no chaplain appointed to the house, and the sunday service is almost always conducted by dissenters of various denominations.

I have not marked the prayer-meetings as distinct from the other services, because, on almost all occasions, there is a discourse, called an "address," delivered at these meetings, and this makes them very nearly resemble the other services.

The following is an epitome of the religious accommodation of all the denominations:—

	Churches and Chapels.	Total Sitings.	Free Sitings.	Ministers.	Sunday Services.	Week-day Services.	Communicants and Members of Dissenting Chapels.
Church of England .	7	4,978	1,558	11	11	3	322
Other denominations	20	7,604	2,728	14	35	31	1,576
Total . .	27	12,582	4,286	25	46	37	1,898

This tabular view is much better in appearance than in reality. Taking the present population of the parish at 45,000, the lowest estimated number, and supposing that only half of them, 22,500, are attached to the church of England; if 7,500 be deducted from this, for the young, the aged, and the sick, there remain 15,000, who require church room, and for whom only 4,978 sittings are provided. But St. George's parish is, in many parts, exceedingly poor. A large majority of the people cannot afford to pay for seats. Nor have they decent clothes in which to go to such seats, if they could pay for them; and the poor are often very scrupulous about going to a place of worship in clothes which they consider shabby. Suppose that 10,000 out of the remaining 15,000 need free seats. There are only 1,258 to supply this want, for the 300 free seats in the two prisons are not available for the parish.

But even this, bad as it is, is not all. The parish church is the only established place of worship in which there is an afternoon service; and as this is the time at which servants and poor married women are generally able to attend, they must either walk a long distance to seek some other church, or neglect worship altogether.

Another circumstance remains to be mentioned. There are in this parish no church-rates; and therefore nothing is provided with which to defray the current expenses of conducting the services. To remedy this, the seats for the evening lecture are let; some of the lessees do not reside in the parish, and there are not a few cases in which non-parishioners, though they have taken the seats only for the evening, really occupy them at other parts of the Sunday, to the exclusion of parishioners. There are great numbers willing to pay for seats who cannot obtain them, and they are consequently compelled to go to places of worship in other parishes. Of course, when the rich cannot purchase seats, there is little chance of the poor finding much accommodation.*

The same observations apply in some measure to the other denominations. They have ministers to support, servants, lighting, cleaning, rents, &c. to pay, and therefore, if ever so well disposed, they cannot afford to appropriate a very large portion of room to free seats.

* It gives me great pleasure to state that, since the above was written, I have been informed that a plot of ground has just been purchased in the Kent-road, for the purpose of erecting an additional church.

PART I.—PUBLIC WORSHIP.

No.	Name.	Locality.	Denomination.	Total No. of Sittings.	Free Sittings.	No. of Ministers.	Sunday Services.	Week-day Services.	No. of Communicants, and, in Dissenting Congregations, of Members.
1	Parish Church	High-street	Episcopal	1,200	550	4	3	1	130
2	St. John's Chapel	London-road	Ditto	678	58	1	2	1	80
3	Philanthropic Chapel	Ditto	Ditto	1,600	250	2	2	1	50
4	Marshall's Chapel	Blackfriars-road	Ditto	800	..	2	2	..	50
5	Marshall's Chapel	High-street	Ditto	100	100	1	1	..	6
6	Queen's Bench Prison	Borough-road	Ditto	200	200	1	1	..	6
7	School-room	Ditto	Ditto	400	400	1*	..	1	..
Total Church of England				4,978	1,558	11	11	3	322

* Minister from the parish church officiates.

PART II.—PUBLIC WORSHIP.

No.	Name.	Locality.	Denomination.	Total No. of Sittings.	Free Sittings.	No. of Ministers.	Sunday Services.	Week-day Services.	No. of Communicants, and, in Dissenting Congregations, of Members.
1	Parish Workhouse	Mint-street	Various*	100	100	..	1	..	..
2	School-room	John-street	Calvinistic Methodists	250	250	..	1	..	..
3	Lodging-house	Mint-street	Various	50	50	..	1	..	..
4	School-room	Amicable-row	Ditto	350	350	..	1	..	..
5	Synagogue	Prospect-place	Jews	100	30	1	2*	2*	..
6	Ditto	London-st., London-road	Ditto	120	120	1	2*	2*	..
7	Chapel	Chapel-court, High street	Not occupied	450	..	..	..	..	..
8	Ebenezer Chapel	Red Cross-street	Wesleyan	100	100	..	1	..	..
9	King's-court Chapel	Suffolk-street	Baptist	200	30	1	2	2	50
10	Borough-road Chapel	Borough-road	Ditto	1,400	500	1	2	2	300
11	Jirch Chapel	Cardon-row	Independents	160	160	1	2	1	20
12	Salem Chapel	Obelisk	Ditto	160	160	1	2	..	30
13	Star-court	Mint	Ditto	20	20	..	1	..	..
14	Welch Chapel	Guildford-street	Ditto	500	100	..	2	3	320
15	Collier's rents	White-street	Ditto	550	180	1	2	1	70
16	Chapel	Weber-street	Wesleyan	70	..	..	2	..	..
17	Tabernacle	Borough-road	Baptist	1,400	200	1	3	1	500
18	Chapel	Union-street	Independent	464	148	1	2	1	206
19	Chapel	Prospect-place	Wesleyan	500	60	..	2	..	..
20	Roman Catholic Chapel	Borough-road	Roman Catholic	660	100	3	4	18	80
Total Dissenting.				7,604	2,728	14	35	34	..

* No chaplain.

* No service, unless 10 persons above the age of 13 are present.

* Ditto.

It could not be expected that, where the religious destitution is so great, any extensive means of intellectual cultivation would be provided; and this inference is borne out by the result. There are but four day-schools in the parish supported or aided by public charity, which contain 1,595 scholars; and 9 Sunday schools, containing 2,050 scholars. It is unnecessary for me to say that I could not, by my individual exertions, procure a return of all the private day-schools in the parish; but the reports of the Statistical Society of London afford the means of forming an estimate of the probable number of children receiving education in such schools. On the average of the whole of Westminster, the proportion of children attending private day-schools, compared with those attending charity-schools, was as 118 to 100. This calculation would afford almost too favourable a standard of comparison for this parish, as it includes the more opulent districts of St. George's, Hanover-square, St. James's, and the Strand. In St. John's and St. Margaret's, Westminster, which more closely resemble this parish, the proportion was only as 92 to 100. It may, therefore, be fair to allow 100 per cent., or as many children as are attending charity-schools, for the number of private scholars. Upon this supposition there will be 3,190 children attending day-schools. It has usually been estimated that one-fourth of a population are of a fit age to attend school. Some persons have objected to this proportion as excessive, on account of the number of children within the supposed ages who find employment in factories and manufacturing establishments; but this objection cannot hold good in this parish, as no such employment exists for children in the neighbourhood, and therefore it may fairly be required that one-fourth of the whole population, or 12,500 children, should be receiving instruction in schools. But upon the above calculation only 3,190, or 25·5 per cent. are attending day-schools; and if the whole number of the Sunday scholars, many of whom have already been reckoned among the day scholars, be added, there will only be 5,240, or 42 per cent, attending schools of any kind. Allowing for every deficiency in this calculation, the melancholy fact cannot be doubted, that at least one half of the children within the parish are growing up without any kind of religious training, or mental cultivation.

The following is a detailed account of these schools, from which it will be seen that the central school of the British and Foreign Society tends very much to swell the numbers; and that if this school, which is accidentally connected with the parish, were omitted, the number would be reduced to less than one half. The national school now contains 405 scholars, but a year ago it only contained 150. Since then a new school-room has been built, and the number of scholars has been nearly tripled.

Total of Charity Day-schools,—

	Boys.	Girls.
1. St. George's National School	204	101
2. British and Foreign ditto	550	330
3. Roman Catholic ditto	100	80
4. Infant ditto	80	80
Total	<u>1034</u>	<u>561</u>

Total of Sunday schools,—

	Boys.	Girls.	Male Teachers.	Female Teachers.
Church of England . . .	103	104	9	8
Other denominations. . .	878	965	124	125
Total . . .	981	1069	133	133

1. *St. George's Parochial and National Schools, Borough-road*, containing parochial boys 76, and girls 50, of whom 50 boys and 40 girls are clothed; with national boys 228, and girls 51. Total number of scholars 405. The income in the year ended Midsummer 1839, was 478*l*.

2. *British and Foreign School, Borough-road*, in which were 850 scholars in May, 1839, viz. 550 boys, and 300 girls. The number admitted during the year terminated in that month was 1,198, of whom 718 were boys, and 480 were girls. Each child pays 2*d*. a-week. The total number received on the books to the present time is 49,442. The income in 1838 was 5,248*l*. The number of teachers in training, up to April, 1838, was 24 for boys' schools, and 18 for girls' schools. The number received in the ensuing year was 107 for the former, and 76 for the latter. On the 1st of April, 1839, there were in training 18 male, and 24 female candidate teachers.

3. *Infant School, Kent-street*, containing 80 boys and 80 girls. Total 160.

4. *Roman Catholic School, London-road*, containing 100 boys and 80 girls. Total 180.

SUNDAY SCHOOLS.

Church of England.		Boys.	Girls.	Male Teachers.	Female Teachers.
St. John's, London-road . . .	. .	103	104	9	8
Other Denominations.					
1. John-street, Mint . . .	{ Calvinistic } { Methodists. }	129	151	19	19
2. Amicable-row . . .	, ,	258	294	23	23
3. Mansfield-street . . .	, ,	166	170	30	30
4. Borough-road Chapel . .	Baptists .	150	150	19	19
5. Collier's-rents . . .	Independents	20	30	6	6
6. Webber-street . . .	Methodists	35	30	5	4
7. Union-street . . .	Independents	60	80	10	12
8. Welch Chapel . . .	, ,	60	60	12	12
		878	965	124	125

There is only one literary Society in the parish, viz., the Southwark Literary Society, now located in Bridge-house Place. It was established in 1832, and the number of members is about 300. The subscription is 1*l*. 10*s*. a-year, for which the subscriber receives about 40 lectures annually, and has the use of a library of 4,000 volumes. There are also three evening meetings of classes in each week, one for French, another for German, and the third for discussion. The number of

members has amounted to between 500 and 600, but in consequence of a slight schism, several members have seceded. In an account which I received of this Society, it is stated "that the benefits derivable from it are very great, and its promoters have good reason to be satisfied with the improvement in knowledge, and, consequently, in morals, of a considerable portion of the community of this borough; but yet is felt the want of the assistance of the better educated inhabitants, who being independent of little feeling, would check any ebullition in others; and, unfortunately, the withholding their assistance has led to the suspicion that they are unwilling to raise others in intellectual and moral acquirements." Although this judgment is too severe, there can be no doubt that the indifference of the upper classes to the moral destitution of their fellow parishioners, and their too frequent want of co-operation in attempts to lessen it, is a great discouragement to those who are anxious to endeavour to promote improvement, and inflicts a positive evil upon the parish.

It is impossible that such a state of things as has been described could exist without producing its customary fruits, neglect of religion, immorality, and vice, and we find that these abound in the parish. It is too true that they exist, to a greater or less degree, in every locality, but I shall proceed to show that the proportion of criminal offenders living in this parish, and of houses for the accommodation of vice situated in it, far exceeds the average, and brands the district with a distinctive character of profligacy. It may be said that it has for centuries possessed this character. This is true; but it is equally true that the same want of church accommodation, and the same neglect of the moral training of the lower classes, have existed at the same time. There has never been more than one church; and where vice has congregated, it has been allowed to fester and spread without restraint, until it has at times become a perfect leprosy, and threatened the whole neighbourhood with a moral pestilence, when alarm and fear have induced the authorities to take measures for its abatement.

The following is a return of the number of depredators and offenders against the law who have been subjected to the law, or have been brought within the cognizance of the police, and are known to be residing in the parish at the present time. To this is appended a similar return of the number of houses for the accommodation of delinquency and vice. These statements, it must be observed, appear to be in no degree exaggerated. The former are divided into three classes: 1st. Persons who have no visible means of subsistence, and who are believed to live wholly by violation of the law, as by habitual depredation, by fraud, by prostitution, &c. 2d. Persons following some ostensible and legal occupation, but who are known to have committed an offence, and are believed to augment their gains by habitual or occasional violation of the law. 3d. Persons not known to have committed any offences, but known as associates of the above classes, and otherwise deemed to be suspicious characters.

The number in each class is as follows:—

Burglars of the first class	3
Highway robbers, first class	3
Pickpockets, first class	15
Ditto, third class	2

Common thieves, first class	102
Ditto, second class	20
Ditto, third class	18
Forger, first class	1
Person committing frauds, third class	1
Dog stealers, first class	4
Coiner, first class	1
Receivers of stolen goods, first class	2
Ditto ditto second class	3
Prostitutes, well dressed, living in houses	60
Ditto ditto, walking the streets	141
Ditto, low, infesting low neighbourhoods	120
Vagrants,* first class	160
Habitual disturbers of the public peace, first class	90
Ditto ditto second class	3
Begging letter-writers, first class	2
Utterers of base coin, first class	2
<hr/>	
Houses for the reception of stolen goods	6
Ditto suppressed since the establishment of the metropo- litan police	11
Houses for the resort of thieves	6
Ditto suppressed since the establishment of the metropo- litan police	6
Average number daily resorting to each	30
Number of brothels where prostitutes are kept	5
Average number of prostitutes kept in each	4
Number of houses where prostitutes lodge	168
Number of houses of ill fame where prostitutes resort	45
Mendicants' lodging-houses	11
Average daily number of lodgers in each	41

From the first part of this statement it appears that there are 693 notoriously bad characters residing in the parish, who are known to the police. This number amounts to 1 in every 65 of the whole population, or 1 in 33 of the adults! If, on an average, only 3 persons form the family or the society of each of these characters, nearly 1 in every 20 of the population is thus rendered vicious, or is exposed to the contamination of a constant familiarity with profligacy and vice.

But we are enabled to show, by a comparison with the whole of the metropolitan district, that the proportion of depredators and of houses of vice in this parish is greatly beyond the average. A similar Table to that which is above given, but extending to the whole of the district under the metropolitan police, is inserted in the Report of the Constabulary Force Commissioners. The population of this district amounted, in 1831, to 1,515,592, and that of the parish of St. George to 39,769; the latter forms, therefore, the thirty-eighth part of the whole district. Adopting these data for the purposes of comparison, it appears that the number of burglars is exactly the average, being 3 in 107. There are no house-breakers in this parish, whereas there are 110 in the whole district. It is a remarkable proof of the classification existing among habitual depredators, that the police is able to distinguish between burglars and house-breakers; but it confirms the fact, which has been incidentally mentioned by more than one popular writer, that burglars, or "cracksmen," consider themselves a superior class of artists in their line. The

* Those who have read the Report of the Constabulary Force Commissioners well know that "Vagrants" are persons living by the habitual practice of imposition and fraud, to which is usually added thieving, and other more aggravated offences.

number of highway robbers in this parish, although small, is three times the average, including in the total number all the suspected characters. In fact, the number of persons of this description in the metropolis is very small, amounting only to 38, of whom 19 belong to the first class. The number of pickpockets in the parish is below the average, which might be expected from the absence of the higher ranks of society upon whom this class of offenders preys; it is 17 out of 773. On the other hand, the number of common thieves is 50 per cent. above the average, being 140 out of 3,657; and the proportion is much greater if the first class, or known depredators, be examined, as there are 102 out of 1,667, or 1 in 16. The number of receivers of stolen goods is small; but great exertions have been made by the police to diminish this fruitful provocation of vice. Out of 17 houses for the reception of stolen goods, 11 have been suppressed since the establishment of the new police. The number of prostitutes is very large in this parish. Of well-dressed females, living in brothels, the proportion is one-fourteenth; of well-dressed street-walkers, one-tenth; whilst of the lowest class it is proportionally less, amounting only to one-twenty-ninth. The number of vagrants, whose real character has been explained in a preceding note, amounts to one-eleventh; and that of habitual disturbers of the peace to one-eighth, instead of one-thirty-eighth, of the whole number. The number of houses for the reception of stolen goods and for the resort of thieves is not above the average; but a much larger proportion of such haunts have been suppressed by the police than in the other parts of the metropolis. In fact, their number and notorious character must have attracted the early attention of the police, and caused their speedy suppression. The number of brothels, or better kind of houses of ill-fame, is small; but that of the lowest kind of such houses is very large, amounting to one-nineteenth of the whole number; and the number of houses where prostitutes lodge to more than one-fifteenth. There are no gambling-houses in the parish. The number of lodging-houses is large, amounting to one-twentieth; but the average number of lodgers in each far exceeds the average, being 44 instead of 11. A fuller account of these houses has been given in a previous part of this paper.

Among the houses of accommodation for vice must be included, I fear, to a certain extent, the public-houses and beer-shops; at least a certain proportion of them deserve this character, although, of course, there are many of the most respectable description. The number of public-houses in this parish at the close of 1839 was 91; of beer-houses, 44; and of inns, 13. As several of these houses are used by mere passengers, who come up to London for the day, no comparison can be fairly instituted between their number and that of the resident population.

There is no savings' bank in the parish. The number of clubs and friendly societies is 7, of which the following is a list. I have not been able to furnish the number of the members, and Mr. Tidd Pratt, to whose kindness I am indebted for the list, possesses no record of that fact:—

1. New Olive Branch, Windsor Castle, Great Suffolk-street.
2. Honest Hearts, Blue-coat Boy, Lant-street.
3. Benefit Society, Grapes, Great Suffolk-street.

4. Benefit Society, Dun Horse, High-street.
5. Hercules Union, the George, Waterloo-road.
6. William the Fourth, Red Lion, Pearl-row, Blackfriars-road.
7. St. George's Royal Union, Dover Castle, Little Surrey-street.

This parish is remarkable for the number of charitable institutions, unconnected with the locality, which are situated in it; and it is a painful reflection that, while there are so many of this class that the virtue and benefits of charity are constantly brought before the eyes of the parishioners, there are so few institutions of any kind for the benefit or improvement of the inhabitants. Among the former class are the

Bethlem Royal Hospital.
 The House of Occupation.
 The Magdalen Hospital.
 The Philanthropic Society.
 The School for the Indigent Blind.
 The Asylum for the Deaf and Dumb.
 The Royal Freemasons' School.
 The Schools of the Yorkshire Society.
 The Fishmongers' Almshouses.

Among the institutions which may be said to be connected with the parish are,

The Surrey Dispensary.
 The South London Dispensary.
 The Rev. Rowland Hill's Almshouses.
 Drapers' Almshouses; and
 Hedger's Almshouses.

I have subjoined, in an Appendix, a description of these institutions, with some useful statistical information concerning them, particularly with regard to Bethlem Hospital and the Asylum for the Deaf and Dumb. I have also added a list of the charitable endowments of sums of money directly connected with the parish, which amount to 1,011*l.* 1*l*s. annually.

I cannot conclude this account without expressing my hope that the facts which have been laid before the Society will arouse the attention of the authorities and of the inhabitants of the parish to the deplorable state of the district, to the great deficiency of church accommodation, of clerical ministration, of educational establishments, of savings' banks, of charitable institutions, and of other general means of moral and social improvement; that they will bring to their notice the existence of a large mass of vice and wretchedness, and the utter inadequacy of the past efforts on the part of the inhabitants to remove or lessen it. If they shall in any degree tend to produce this effect, I shall have the satisfaction of reflecting that my labour in collecting the information will not have been in vain.

Appendix.

1. *Bethlem Royal Hospital, St. George's Road*, for the reception and cure of lunatics. The earliest mention that has been found of the reception of lunatics in Bethlem is in a visitation of the Hospital made by virtue of a royal commission in the fourth year of Henry IV., 1403-4. In 1547 the custody and government of the house was assigned by the Crown to the city of London, by the same letters patent

which contained the charter of St. Bartholomew's Hospital. The present edifice was commenced in 1812, and was completed and ready for patients in August, 1815. It has accommodation for 364 patients of both sexes. The total receipts in 1827 were 18,994*l.*, and in 1837, 27,172*l.* In 1827, the expenditure, including the management of the property, was 15,221*l.*, in 1837 it was 15,764*l.*

The number of patients in 1839 was—

	Males.	Females.	Total.
In the hospital on 1st January	140	132	272
Admitted in 1839	122	178	300
Total	262	310	572
Discharged in 1839 cured	56	86	142
,, uncured	18	37	55
,, by request of friends	1	2	3
,, as improper objects	23	12	35
Died	12	10	22
Remaining on 31st December, out on leave	4	12	16
,, ,, in hospital	148	151	299
Total	262	310	572

The following is a summary of the number of patients treated between 1820 and 1836.

Resident on 1st January, 1820, or admitted from that date to 31st December, 1836.

	Males.	Females.	Total.
Curables	1,294	1,877	3,171
Incurables	68	98	166
Criminals	85	33	118
Total	1,447	2,008	3,455

Discharged cured, 1820 to 1836.

	Males.	Females.	Total.
Curables	546	934	1,480
Incurables	5	17	22
Criminals	20	12	32
Total	571	963	1,534

All patients who are admitted in the "curable" department, and who are not discharged within 12 months from the time of admission, are discharged at the close of that period, unless there be still a prospect of effecting their cure. The number thus discharged uncured between 1820 and 1836 was 834, of whom 298 were males and 536 females. This number included 3 incurables and 2 criminals. The number discharged by request of friends was 98, of whom 75 were curables and 23 incurables: 489 were discharged as improper objects; viz., paralytic, sick and weak, idiotic, epileptic, apoplectic, pregnant, &c., of whom 6 were incurable. The number who died was as follows:—

	Males.	Females.	Total.
Curables	71	74	145
Incurables	20	27	47
Criminals	19	9	28
Total	110	110	220

Of 63 deaths which occurred from 1830 to 1836, 23 were caused by exhaustion, and 5 by gradual decay or debility; 7 by apoplexy, 6 by epilepsy, 6 by diarrhoea, 3 by bronchitis, 2 by suicide, and the rest by various other diseases.

The average age of curable patients admitted in the 5 years from 1830 to 1834 was as follows: in 1830 and 1832, 37 years; in 1833-4, 36 years; and in 1831, 35 years.

Of the 977 admitted in these years

61 were between 10 and 20 years of age.					
261	„	20	„	30	„
292	„	30	„	40	„
203	„	40	„	50	„
107	„	50	„	60	„
43	„	60	„	70	„
9	„	70	„	80	„
1	„	80	„	90	„
<hr/>					
977					
<hr/>					

The average time that each of these patients remained in hospital was 204 days.

2. *The House of Occupation, St. George's-road*, was founded about 1552, and removed to its present site in 1828. This establishment is connected with Bridewell Prison, and is under the control of the governors of Bethlem Hospital. It is founded for the benefit of poor and destitute children; those without character, idle and disorderly vagrants; and those who have been committed to prison, and discharged in due course of law. It is limited to children coming from the city of London, the county of Middlesex, and the royal hospitals; viz., Christ's, St. Thomas's, St. Bartholomew's, and Bridewell. Many of the boys are regularly apprenticed to trades on the establishment; and, after serving seven years, they become free of the city of London. The girls are taught needle and household work. There are now in this asylum 130 boys and 130 girls; total, 260.

3. *Magdalen Hospital, Blackfriars-road*. Instituted in 1758. Its object is "the relief and reformation of penitent females who have deviated from the paths of virtue." It admits none who are diseased or pregnant. It has accommodation for 100 women. The report, up to 8th January, 1838, states that there have been received, from the foundation of the institution, 6,398 individuals, of whom 4,327 have been reconciled to friends, or placed in service; 104 have been discharged as lunatic or otherwise incurable; 106 have died; 1,112 have been discharged at their own request, and 645 for bad behaviour; 2 have absconded; and 102 were in the house at the date of the report.

4. *Philanthropic Society, London-road*. Instituted 1788. It receives, 1st. Children of convicted felons, who have been sentenced to transportation or death. 2nd. Criminal boys under 12 years of age, or such as have been charged with some crime before a magistrate. They must be the sons of destitute persons, who are unable to take care of them; or of those persons who, from their own vicious practices, have been the cause of their children's delinquency. The income in 1838 was 5,390*l*. The number of children in the establishment was 163, of whom 123 were boys, and 40 were girls.

5. *School for the Indigent Blind, London-road*. Instituted in 1799.

Its object is "the education of the blind, the imparting to them religious knowledge, and instructing them in some trade, by which they may be able to provide for their future subsistence." Persons admitted are clothed, boarded, lodged, and instructed. The income in 1838 was 17,343*l*. It contains 65 males and 67 females; total, 132. It has afforded its benefits to 252 persons since its establishment.

6. *Asylum for the Deaf and Dumb, Old Kent-road.* Instituted in 1792. Its object is to board, clothe, and educate children who are deaf and dumb. The income in 1838 was 9,917*l*. There are at present 220 children in the house. Since its establishment it has educated 1,550 children. The value and importance of such an asylum will be apparent from the following fact, viz., that in 20 families, containing 159 children, 90 were deaf and dumb. I subjoin the list:—

No.	No. of Children.				Number of those Deaf and Dumb.
1	.	.	.	10	7
2	.	.	.	8	7
3	.	.	.	12	6
4	.	.	.	11	5
5	.	.	.	10	5
6	.	.	.	8	5
7	.	.	.	8	5
8	.	.	.	7	5
9	.	.	.	6	5
10	.	.	.	12	4
11	.	.	.	10	4
12	.	.	.	9	4
13	.	.	.	8	4
14	.	.	.	8	4
15	.	.	.	7	4
16	.	.	.	6	4
17	.	.	.	7	3
18	.	.	.	6	3
19	.	.	.	3	3 all.
20	.	.	.	3	3 all.
				159	90

7. *Royal Freemasons' School, Westminster-road.* Instituted in 1788. Its object is to "maintain, clothe, and educate an unlimited number of the female children and orphans of reduced brethren belonging to the Society of Free and Accepted Masons." From 1788 to July, 1838, there have been admitted into the school 482, of whom 403 were apprenticed or returned home, 21 died, and 58 are now in the school.

8. *Yorkshire Society's Schools, Westminster-road.* Instituted in 1812. Its object is "to educate, board, and clothe children, one or both of whose parents have been born in Yorkshire, and who have been in a respectable line of life, but reduced by misfortune, and who have resided for three years and upwards within five miles of the Royal Exchange." No child is eligible whose parents have received parochial relief. The income in 1838 was 1,468*l*. The school contains 31 boys and 19 girls; total, 50.

9. *Fishmongers' Almshouses, near the Elephant and Castle.* Partly in St. George's and partly in Newington parish. One portion of the building was erected in 1636, and the other in 1724. The chapel was built in 1618. There are 42 houses, each containing 2 rooms; 20 of these are in Newington parish. Persons eligible are freemen of the

company, and above 50 years of age. If married, their wives are allowed to live on the premises, but not any children.

10. *Surrey Dispensary, Union-street, Borough.* Instituted in 1777. Receipts for the year ending 24th June, 1837, 1,180*l.* The number of patients admitted in 1837 was 4,597, of whom 3,841 were cured, 96 relieved, 83 discharged, 73 died, and 504 remained under treatment. The report of the number of cases from 2d March, 1778, to 1st January, 1838, is as follows:—Cured, 171,841; relieved, 15,174; discharged, 5,119; dead, 5,687; under treatment, 504; total, 198,325. Of this number, 31,796 were midwifery cases.

11. *South London Dispensary, Westminster-road.* Established in 1821. Up to the present time it has afforded relief in 15,000 cases.*

12. *Rev. Rowland Hill's Almshouses, Hill-street, Blackfriars-road.* Built in 1811. For 24 poor women, who have each one room, and are allowed coals, &c., and a sum of money weekly. No woman is eligible who has not taken the sacrament regularly at some place of worship for seven years. There is also a School of Industry, in which 24 girls are clothed and educated.

13. *Drapers' Almshouses, Hill-street.* Money was left for their erection in 1650. There are 12 poor women provided for in them; 9 from St. George's parish, and 3 from the Drapers' Company.

14. *Hedger's Almshouses, Webber-row, Waterloo-road.* Erected in 1797. They consist of 8 houses, of 2 rooms each, which are inhabited by 8 women.

CHARITIES directly connected with the Parish.

Donor's Name.	Date.	Present Yearly Amount.	How applied.
		£. s. d.	
W. Evans . . .	1581	5 4 0	Bread for the poor.
S. Skydmore . . .	1584	1 0 0	Fuel for the poor.
J. Savage . . .	1587	5 0 0	For decayed householders.
L. Kemps . . .	1610	5 0 0	Bread for poor.
H. Smith . . .	1620	20 0 0	For clothes for poor.
W. Cowper . . .	1622	7 0 0	The poor.
Ditto . . .	1630	79 17 6	Ditto.
W. Brooks . . .	1627	1 0 0	Ditto.
S. Simmonds . . .	1631	94 0 0	Ditto.
Sir J. Fenner . . .	1633	29 0 0	For bread and Bibles.
W. Brooke . . .	1648	5 0 0	For the poor.
H. Williams . . .	1653	58 0 0	Pensions to widows.
E. Martin . . .	1645	26 0 0	For Bibles.
E. Dudson . . .	1672	2 12 0	Bread for poor.
T. Grayson . . .	1679	2 0 0	Ditto.
J. Sayer . . .	..	565 0 0	Weekly pensions, &c.
— Delaforee . . .	1805	90 0 0	Pensions, gratuities to master, mistress, and children in the workhouse, &c.
E. Belcher . . .	1815	0 18 0	For the sick poor.
Sir T. Campbell . . .	..	15 0 0	Coals for distribution.
Total . . .	..	£1,011 11 0	

* In addition to these two medical institutions, within the precincts of the parish, there is one extra-parochial, called the Infirmary for the Diseases of Children, situated in the Waterloo-road, where about 2,000 diseased children from St. George's parish are annually relieved.

Report to the Council of the STATISTICAL SOCIETY OF LONDON, from the Committee appointed to consider the best mode of taking the Census of the United Kingdom in 1841. Adopted in Council, 8th April, 1840.

THE Committee appointed for the purpose of "considering the steps most desirable to be taken with reference to the census of the population in 1841, more especially with regard to the machinery which may be most effectual to the furtherance of that important work, and the points which it may be most desirable to include in the inquiry," beg to submit the result of their labours.

Their first efforts were directed to obtaining from those countries in which good enumerations of the population have been made, information respecting the forms used, the agency employed, and the expences incurred; and through the kindness of several of the foreign members of the Society, and the Ministers of foreign States in England, an extensive collection of such information, with regard to the most recent enumerations, has been made. From M. Dieterici has been received a brief memoir on the last Prussian census taken at the end of 1837, accompanied by the forms in which the details were collected; from M. Moreau de Jonnés, with some useful observations, a complete set of official papers used in procuring the last census of the population in France, in 1836; from M. Quetelet, with observations upon the difficulties experienced in Belgium in the course of such labours, a copy of the official documents connected with the last census of Belgium, in 1829; from Colonel Forsell, of Stockholm, a brief notice of the statistical system of Sweden; from Professor Holst, of Christiania, a description of that of Norway, with its most recent official publications; from J. B. Heath, Esq., Consul for Sardinia, the official report of the census taken in that kingdom in 1838; from Count Serristori, a brief notice of the modes of enumeration pursued in Tuscany; from Mr. Stephenson, Minister for the United States of North America, the statutes under which the successive enumerations of those States have been made down to 1830; and from Mr. Farr, the statute passed for taking the census of the United States in the present year, together with tabular outlines proposed for the collection of various statistical data, in connexion with that census. They have also examined the successive statutes for enumerating the population of Great Britain and Ireland: the abstracts of the enumerations made in accordance therewith; the minutes of evidence before the Population Bill Committee of the House of Commons, in 1830; and the papers of an industrial census of between nine and ten thousand inhabitants of Coventry, made at the close of 1838, under the direction of Mr. Fletcher, by whom they were submitted. A brief notice of the principal features of each system of enumeration described in these documents will afford the best guarantee, that can be offered for the soundness of the suggestions which the Committee have to submit for your approval.

PRUSSIA.

The enumerations of the Prussian people, of which the last was made at the end of the year 1837, are not less remarkable for their exclusive con-

templation of the purposes of police and instruction, in disregard of vital statistics, than for the test which they afford of the completeness of that organisation which accomplishes the whole labour by the local police authorities *triennially*, as part of their duty, without any express cost to the community.

The last census of the population was taken according to a form which contains, first, children, until the completion of the 14th year, divided into three periods: viz.—

a, until	the completion of the 5th year.		
b. from the 5th to	„	7th	„
c. from the 7th to	„	14th	„

In each of these periods of life the sexes are distinguished. The division into these classes refers partly to the obligation to attend instruction in public schools, unless it is given privately; and, partly, to the responsibility of children with regard to the consequences of their actions. The obligation to attend school commences with the completion of the 5th year; but with reference to responsibility, the general law of the Prussian States ordains that children before the completion of the 7th year shall still be considered as irrational. From 7 years old, however, to the completion of the 14th year, they are considered as minors, and unable to weigh the consequences of their actions. Next follows a statement of the number of those persons who have passed their 14th, but have not yet completed their 16th year, distinguishing, as before, the sexes. This period has reference to an object of taxation: since the obligation to pay the class-tax (*Klassen-steuer*) so far as it is demanded from unmarried persons, first commences after the completion of the 16th year. Then follows next a statement of the number of males who have passed their 16th year, divided into 7 periods; viz.—

a, to the completion of the 20th year			
b. from the 20th to the completion of the 25th year.			
c, „ 25th	„	32d	„
d, „ 32d	„	39th	„
e, „ 39th	„	45th	„
f, „ 45th	„	60th	„
g, above the 60th year.			

The first four of these divisions relate to the obligation of serving as a soldier in the Prussian States, which begins at the completion of the 20th year. This is the age at which persons can be required to enter the standing army; the obligation to serve in it continues until the completion of the 25th year. From this period commences the obligation for 7 years (that is, to the completion of the 32d year) to obey the first summons of the militia (*Landwehr*), and for a further 7 years (until the completion of the 39th year) to obey the second summons of the same. The number of males to the close of the 45th year is chiefly given separately, in order to have a class of males corresponding in age, for the sake of comparison, with an important division of the other sex. With the completion of the 60th year commences in the Prussian States the legal exemptions of advanced life; such as exemption from all summonses to serve in a military capacity, or in a general *posse comitatus*; also from the class-tax, so far as it is levied in the lowest division from

single persons ; and, lastly, the privilege of declining to serve in public offices and posts of responsibility.

Then follows the number of females who have passed their 16th year in 3 periods, viz.—

a, to the completion of the 45th year.

b, from the 45th to the completion of the 60th year.

c, above the 60th year.

These sub-divisions have reference to the fact that the period of child-bearing generally terminates at the close of the 45th year. The 60th year is taken in uniformity with the divisions of the male sex, as the period at the completion of which old age begins.

The results of the foregoing enumeration of the inhabitants, according to age and sex, relate chiefly to their numbers. It appeared further important to know also the number of those actually married ; and in order to ascertain this with correctness, the number of married men and of married women were enumerated separately. The numbers should correspond exactly ; but the number of married females is constantly returned as somewhat greater than that of married males. The cause of this appearance is that men are occupied as seamen, merchants, or in many other employments out of the country during the taking of the census, who have left their wives behind in it. In those cases, too, in which married couples have been separated for a long time, on account of industrial or other circumstances, it often happens that the men pass themselves off as unmarried, because as such they obtain employment more easily in several occupations : whilst, on the contrary, a female who is married will conceal the fact only in very rare instances.

Lastly, the population is enumerated separately according to its religious profession. There are five classes, viz.—

a, Evangelical Christians.

b, Roman Catholic Christians.

c, Persons belonging to the Greek Church.

d, Mennonites.

e, Jews.

The last class has two sub-divisions, viz., the Jews who have the full privilege of burghers, and those who have not. This privilege was given by the law of 11th March, 1812, upon conditions easy of fulfilment to all the Jews who were then in the country ; but this law was not extended to the provinces which have been since acquired, and the grant of citizenship still continues there as a particular favour to certain families. The Christians living in the Prussian States may be divided into two great leading classes, with reference to political relations : according as they acknowledge a foreign spiritual head of the Church in the person of the Pope at Rome, or not. The first are Roman Catholics, for whom no further sub-division is required : from the latter, on the contrary, are already separated the Mennonites, who refuse to take a part in war, or to take an oath, and do not baptise before the age of discretion, commencing at 14 years of age ; and those belonging to the Greek Church. The separation of the Mennonites is requisite, because, on account of their particular tenets, it has become necessary to subject them to special enactments and limitations. The persons belonging to the Greek church are only in part members of that church which in

Russia is accounted orthodox ; another portion consists of a sect separated from it, viz., the Philippones : nevertheless, on account of the total number of members of the Greek church living in the Prussian States being so small, it has not been deemed necessary to mark this distinction. Any classes which remain after the separation of the Roman Catholic and Greek Churches, and the Mennonites, are here included under the head of Evangelical Christians (Protestants). When, however, in this, by far the largest, section of the population of the Prussian States, there are any sub-divisions, the Government does not consider any separate jurisdiction for superintending each requisite, but they are generally placed together under the evangelical consistories appointed for each province. The Evangelical Christians, therefore, include as well the now united communities of Lutherans and reformed Christians (Calvinists), as those bodies of the two consistories above named, which have not yet joined the union. Also the evangelical communities of brethren, and those which are called in common life “*Herrenhüter*” (Moravians), are included in this division. Separatist bodies are not otherwise recognised in the Prussian States.

No extra officers are employed in the preparation of the censuses of the Prussian States, and nobody is paid or receives any additional remuneration for it. The police superintendence (Polizei-Obrigkeit) of each place is bound to undertake the enumeration at the end of each third year, as a task belonging to his regular duties. The enumerations taken by the local authorities are handed over to the landrath* of the circle, and are tabulated and abstracted in his office, with the rest of his ordinary business. The landrath is bound to take care that his abstract contains all the places within his circle : he has also the power, and it is his duty, to direct a second enumeration in any case in which he has grounds for supposing that the census was not taken with strict accuracy. The several landraths send the enumerations of their circles, abstracted by them, to the respective regencies† to which they belong, as do also those larger towns which are not under the landraths, but under the immediate control of the regencies. From these returns the regencies form new abstracts, exhibiting the population of each city separately, and the population of the other places only summarily in circles. The regencies take care that all the cities and circles within their district are included in their abstracts. They are also empowered and bound to institute local inquiries in cases in which they have reasonable grounds for doubting the accuracy of the returns. These duties likewise belong to their ordinary business.

Lastly, the abstracts made by the regencies are sent to the statistical department, which draws out from them a general statement, comprising the whole State. This department is a permanent office under the superintendence of the cabinet (united ministry), and consists of officers receiving permanent stipends, to whose duty, together with the collection of other information, the elaboration of the population returns belongs. There is accordingly no extraordinary expense in preparing the triennial censuses of the population, except the cost of printing the necessary forms, which is defrayed out of the funds annually allowed

* The landrath is thend councillor, or chief officer, of a circle.

† Regierung.

by the state for the general printing of the regencies. For the sake of completeness, it must be observed that the military authorities annually receive lists of the persons under their control, which the statistical department receives from the War-office.

The result of the census is laid before the King, with an explanatory report by the statistical department, and copies are furnished to the government. But complete copies of the results of the censuses have never hitherto been furnished for the use of the public. There is, moreover, no fund from which the expense of printing copies could be defrayed, and there is no ground for supposing that such expense would be reimbursed by the sale of copies in the usual course of trade. Extracts, however, exhibiting the gross results, are given to the public through the *médium* of the *Staatszeitung* (official gazette). Summary reviews, also, of the population, at the close of the years 1831 and 1837, distinguishing the regencies, circles, and cities, have been given to the public in various publications.

Machinery so uniform as that by which these enumerations are made, it is impossible to find in Great Britain; but the heads of information which they comprise afford valuable suggestions as to the supplementary uses to which any machinery sufficient for an accurate enumeration may be applied; in describing, for instance, the religious communions among which the population is divided, and the proportion that are married.

In *Sarony*, also, the inquiries extend to sexes, ages, the number of families, the number married and unmarried, widowers, and widows; their religious profession; and the number of blind, and deaf and dumb.

FRANCE.

The enumerations of the population of France, made every *five years*, (the most recent in 1836,) are not less remarkable than those of Prussia for the uniformity of the machinery available for their execution, but their method and objects are materially different. Earlier enumerations were made in 1801 and 1806, after which period they were discontinued until 1821; but they have since been quinquennially renewed. The last census was made in the fullest form that has yet been tried.

The method pursued for *Paris* differed from that adopted for the provinces. In Paris, the actual enumeration was performed by *enumerators*, specially appointed by the "Préfet," on the recommendation of the "Maires," who also determined the number requisite for each "Mairie." *Verifiers* were also appointed by the "Préfet," to test daily the accuracy of the enumerators, by examining houses in the district of each with the returns made; and likewise a *controller* for each "Mairie," to superintend the whole labour. The immediate purpose of all this machinery was merely to obtain and publish a simple enumeration of *permanent inhabitants*, the papers being remitted to the office of the "Préfet" for the abstraction of all further particulars. Not only was the enumeration made *by names*, but a separate "bulletin" was devoted to each *individual*, of a form exceedingly intricate, demanding information as to the name, age, sex, domestic condition in regard to marriage or celibacy, trade or occupation, and whether deaf and dumb, blind, idiot, or insane; also whether native or a foreigner. Letters containing the

amplest instructions were directed on occasion of the census in 1836, from the Prefecture of the Seine to the several "Maires," as to their control over the enumerators, and to the enumerators themselves as to the method of their labour. The inhabitants also were advertised of their appointment and duties by placards requesting assistance in the pursuit of their labours.

Both the "bulletin individuel," and the numerous forms for abstracting the information collected in it, are far removed from the simplicity requisite to accuracy and dispatch, where numerous agents, of whom many must be of comparatively limited intelligence, are employed. This defect appears to arise from uniting the labour of the *abstraction* with that of the *collection* of the data; the intricacy of the "bulletin" arising from its being obviously intended for cutting into separate slips, each bearing its own intelligible item of information. Various forms of "bulletin" also were adopted for the registration of individuals in peculiar circumstances, as well as various forms of abstract. Those individuals who were *absent* from their usual place of abode formed an express and very laborious portion of inquiry and enumeration, involving not only great intricacy of statement, but questions to their connexions to which true answers could scarcely be expected; and yet upon such answers as could be obtained must the return be based. The time occupied in the process was no less than two months; and it can scarcely be supposed, therefore, that its results exhibit more faithfully the state of the population *at a given moment*, than those of one which should have consumed less time, though it made less efforts to attain the minutest accuracy. Payment was made to the enumerators according to the number of "bulletins" and abstracts made by them.

Throughout the *Provinces of France*, the enumeration was made on a system of comparative simplicity. It was superintended by the "Préfets" of every department, but its actual execution devolved upon the "Maires" of the several communes, with enumerators appointed for their assistance. These made the census *by names*, but not by a system of "bulletins individuels." The name of each individual was entered in a page containing thirteen vertical columns, for various heads of information concerning each; and the totals of each page were added together to yield the numerical totals for each commune. The heads of this form of enumeration are as follows:—

Number, in the order of enumeration.		Names.		Title, quality, condition, profession or occupation, or functions.	Domestic condition.						Age.	Observations.
Of individuals.	Of houses.	Christian name.	Surname.		Males.			Females.				
1	2	3	4	5	Unmarried.	Married.	Widowers.	Unmarried.	Married.	Widows.	12	13

This form, though far superior to the intricate "bulletin individuel," is by no means of the simplest; and by throwing upon the "Maires" some of the subsequent processes of abstraction, blunders were occasioned in the census of 1831, especially noticed in the letter of instructions addressed by the Minister of the Interior to the several *prefets* for taking the census of 1836. It appears, also, from the same document, that the time to be occupied in the provincial census was six weeks; but it was anticipated that instances of delay would occur. The minister's instructions to the *prefets*, containing rules for the guidance of the enumerators, are well worthy of attention to the parties who may be entrusted with the execution of the next census of the British islands. The letter of M. Moreau de Jonnès, which accompanies the papers of the French census, urges the importance of adopting, in England, the "bulletin individuel;" but this system, as compared with a continuous list of houses, families, and individuals *by name*, seems to present no commanding advantages; while in a country where agents have to be employed, and paid expressly for the labour of a census, it involves a trouble, intricacy, and delay, which preclude its adoption.

BELGIUM.

The last Belgian census was made at the close of 1829, so as to present a complete statement of the population at the commencement of 1830, with the intention of its *decennial* renewal. It was carried into effect under *arrêts* of the King; in the towns by enumerators specially appointed by their "administrations;" and in the rural communes by the "bourgmestre," or chief assessor, in person; or by a member of the local administration, assisted by the secretary. Refusal or falsification of information on the part of officers or inhabitants was to be reported to the deputation of the States. The enumeration was by houses, by families, and by individuals registered *by name*, nearly on the same system as that of the French provinces; but, in lieu of noting their occupations, columns were substituted to comprise their place of birth, and their religious persuasion, whether Roman Catholic, Protestant, Jew, or none of these. Its execution was urged upon the local authorities as being equally necessary, whether as a local register, or for the purposes of the state; and in lieu of the forms of return being printed in each locality from forms sent down by the Minister of the Interior, as in France, the whole emanated from the royal press at the Hague. For the purpose of reducing the labour of the enumerators to a minimum, a "bulletin" for each house was left with its master at least eight days before the day of census, to the end that, in filling it up, he might be himself the enumerator of all the individuals contained in it; and the enumerators, on coming round, gathered those which had been filled, and filled up others for such parties as had been unable to accomplish this duty, or to get it done for them. Students, boarding-school children, and others in a temporary domicile, were enumerated where found, with special notice of the places where their families resided; soldiers on furlough were enumerated where found; and those in active service, at the places where in garrison. The letters of instruction addressed by the royal order to the local governments are worthy of especial notice, for the clearness with which they provide against many difficulties which,

in the British censuses, have heretofore been left to chance, and must therefore have affected the accuracy of the abstracted results. They recommend some system of local control over the agents employed to make the census, and that to this end the local authorities should consult with such gentlemen of their district as are best known for their scientific qualifications, especially in political arithmetic. The classification of the population by ages, which was very minute, and all other abstracts, were made in the offices of the several provincial governments. The same offices held a check over the returns in the data which they possessed for estimating the probable total of inhabitants, which served to detect any conspicuously fallacious returns.

Still any remarkable degree of exactitude was not obtained; and M. Quetelet, who has kindly supplied to the Committee the official documents from which these facts are derived, suggests, in the letter accompanying them, that sufficient use was not made of the intelligence of the citizens:—"There should have been selected, I think, in each town a dozen instructed persons, who should correspond with a central committee, so as to ensure uniformity and exactitude in the data collected, and who should moreover name in each quarter of their town or commune other individuals known for their zeal and activity, who might superintend, in their several localities, the detailed operations, and impress upon all their importance and utility. This kind of influence, efficiently exercised by persons held in regard, would, jointly with the measures of the local authorities, have produced a very good effect. The local authorities, in fact, do not always perform that which is required of them, with all the caution and exactitude required by science; they confine themselves to taking without thought whatever replies are made to them."

SWEDEN AND NORWAY.

Colonel Forsell's valuable communication describes the constitution of the "Table Commission" of Sweden, to which the superintendence of enumerations of the population is entrusted. This is the centre of the machinery for collecting the accurate and well-digested statistics of human life, for which this country has so long been pre-eminently distinguished. It was established in 1749, having Linnæus among its founders; and publishes every five years the result of returns made by the clergy gratuitously, in obedience to an act of the Diet. The members of the "Table Commission" are all honorary, except the secretary and his clerk, who have about 150*l.* a-year. Every five years the parson of each parish receives the printed form of a table, the columns of which he is required to fill up; having done which, he sends it to the "Contract Prost," who has the superintendence of three, four, five, or six parishes; and the latter forwards it to the bishop; and the bishops, of whom there are twelve, send the whole to the "Table Commission." Besides these quinquennial reports, the clergy are obliged to send in yearly a short notice of the number of births and deaths in every parish. The quinquennial reports exhibit—1. the *births*, male, female, or still-born, legitimate or illegitimate; in what month; the age of the woman; and how many children she has; 2. the *deaths*, at what age, of what sickness or other cause, in

what month, and whether of a legitimate or illegitimate person ; 3. the *marriages*, whether between persons who have never been married, between a widower and widow, between a widower and a woman who has not been married, or between a widow and a man who has not been married ; 4. the *poor*, their number and by whom supported ; and 5. the *circumstances* of every household arranged in three classes,—first, the number who have more than they require for subsistence, or are in good circumstances ; second, the number who can support themselves ; and third, those who are in bad circumstances, or have less than they want for subsistence. The “ Table Commission ” also gives the number of every class of society ; of the nobility, the civil functionaries, the clergy, the army, the seamen, the manufacturers, the agriculturists, the labourers in every branch of industry, prisoners in gaols or in houses of correction, &c. But this information is better obtained by the Board of Trade (Commerce Collegium) and other authorities, so that the clergy might be relieved from the duty of endeavouring to supply it. The *enumeration* of the people supplied by the clergy is, however, by far the most exact, for, during the progress of censuses made by the civil officers for the purposes of taxation, the poor labourers, particularly those of the towns, contrive, if possible, to go away or conceal themselves.

It is obvious that in Great Britain, although the clergy will undoubtedly render important assistance by their moral weight, in keeping the enumerators to their duty, and in influencing the people to the discharge of theirs, yet that no such labour as that of the census of a population so enormous can for a moment be expected from them ; and that therefore Colonel Forsell’s communication, valuable for its picture of peculiar circumstances, and admirable for its spirit, presents no model for our immediate imitation, unless it be in the ultimate minute classification of the living according to ages and occupations.

Professor Holst, of Christiania, has kindly forwarded the official papers of the last census of *Norway*, together with answers given by the Statistical Bureau of the Department for the Finance, Trade, and Duties of Norway to the questions from your Honorary Secretaries. A general census of the population has been five times taken in Norway, viz. in 1769, 1801, 1815, 1825, and 1835 ; and it is now intended to repeat this operation at decennial intervals, so that the next enumeration will be in 1845. Abstracts of each census have been published ; but those of the latest alone contain anything more than a statement of the number of inhabitants in the several parishes, as republished in the journals, the “ Budstikken ” and the “ Norske Rigstidende.” A circumstantial account of the earliest census is contained in Heintze’s “ Statistische tabellarische Uebersicht der Volksmenge in den Königlich-Dänischen Staaten.”

In conjunction with the census taken in 1835, information was also obtained concerning the number of cattle, the state of agriculture, and the cultivation of the various kinds of grain, distinct forms being used for the townships and for the land districts respectively. The commissioners for the execution of this census acted under a circular of instructions from the Finance Department, and were placed under the superintendence of its office of Statistics. They consisted in the towns of the magistracy, and in the country of the parochial justices.

In the more populous and accessible districts, the inhabitants were sometimes summoned to a particular spot to render the information required; but in the sea-coast and mountain districts it was often necessary to proceed from manor to manor; and in the towns the universal method was for the headborough of each division to proceed from house to house, and take down the number of inmates in each. No remuneration for their trouble was made to the commissioners, though sometimes to their assistants; and all were allowed the usual travelling expenses, which, however, do not appear to have been always claimed. The total sum charged to the royal treasury was, therefore, very small, although the census presented a total of 1,194,827 inhabitants, of whom only 129,002 were in towns. It included a notice of the number of blind, deaf and dumb, and lunatic, of which the abstract is not yet published.

In *Denmark*, the enumerations, besides the distinctions according to sex, age, and domestic condition, make an exceedingly minute classification of the people according to "occupations," which is carried out even to the number of women and children dependent upon those engaged in each.

SARDINIA.

The most recent census of any considerable population is that of *Sardinia*, made in 1838, of which an abstract of the results, with papers exhibiting the method of obtaining the data from which they are derived, has just been published by the government of that country. It is one of the most complete in its objects and method of any yet executed in Europe. A superior statistical commission was formed at Turin, under the presidency of Count Beraudo di Pralormo, Chief Secretary of State for the Interior, and was aided by local juntas, or committees, for the several provinces, consisting each of five members, besides the "Intendente" of the province, who acted as its president. It was determined to adopt the system of enumeration *by names*, as the only security against error and fraudulent returns. And it was regarded as the purpose of any census made by a government, to furnish ultimately a synopsis of all the facts indicating the condition of the people,—whether physical, moral, economical, or civil,—which may be susceptible of rapid collection in definite classes and in a numerical form. The chief agents of the actual enumeration were the secretaries of the several communal councils, aided by some of the members of such council, and seconded by the parochial clergy.

The enumeration table employed, of which forms were sent to each junta from Turin, contained nine vertical columns for as many classes of information; and to each individual enumerated was appropriated one of the transverse horizontal lines. The first of the columns was for the number of *houses*, in the order of their enumeration; the second, for the number of *families*, in the order of their enumeration; the third, for the number of *persons*, in the order of their enumeration; the fourth, for the *name and surname* of each person; the fifth, for their *ages*; the sixth, for their *domestic condition*, whether single, married, or widowed; the seventh, for their *place of birth*; the eighth, for their *occupations*; and the ninth, for their *religious profession*. In the latter column it was assumed, that, unless the persons enumerated were Pro-

testants or Jews, they belonged to the established Roman Catholic Church, and that no further distinctions therefore were necessary. Those individuals who, at the time of the enumeration, were away from the usual abode of their family, such as children at nurse or at a boarding-school, labourers migrating, &c., were enumerated, not at the place of their temporary sojourn, but at that of their usual residence. In the cities, it was necessary, on account of the great number to be enumerated, to appoint special agents for specific districts; and these were peculiarly cautious in stating, with regard to the moving population, whether or not they had any other domicile,—those especially coming for only a part of the year to pursue some branch of industry. The total population of the continental portion of the kingdom was found to be 4,125,490.

The tabular abstracts are fourteen in number. I. Is a tabular list of the communes in each province and division, with the number of houses, of families, and of individuals in each. II. Is a summary of the totals of each province, as exhibited in the preceding abstract, with the proportion of families to each house, and of individuals to each family; the city of Turin having an average of 10·08 families to each house, and an average of 4·44 individuals to each family; and that of Genoa, 4·10 families to each house, with 4·86 individuals to each family. III. Shows the distribution of the population of each province according to age and sex; double columns for the latter being found under the following divisions of the ages; viz., under 5 years, 5 to 10, 10 to 20, 20 to 30, 30 to 40, 40 to 50, 50 to 60, 60 to 70, 70 to 80, 80 to 90, 90 to 100, and above 100. IV. Is a summary according to provinces of the domestic condition of each sex, as to marriage, showing 117,000 more widows than widowers, and 100,000 fewer unmarried females than males. V. Should be a summary of occupations, but is not yet completed. VI. Is a classification of the population of each province according to their place of birth, under the three general heads of, first, residents in the province who are natives of it; second, residents in the province who are subjects, but natives of some other province; third, residents in the province who are foreigners. VII. Is an abstract of the population of each province, according to their religious professions, distinguished into 1. Catholic, 2. Jewish, and 3. A Catholic. VIII. Is an analysis by communes of the A Catholic population of Pinerolo, which contains nearly the whole Protestant population of the kingdom. IX. Represents the proportion of population to surface in each province. X. Exhibits the number of communes in each province, containing under 1,000, from 1,000 to 2,000, from 2,000 to 3,000, from 3,000 to 4,000, from 4,000 to 5,000, and upwards of 5,000 inhabitants. XI. Is a list of the towns with more than 5,000 inhabitants, showing the proportion of moving population in each. XII. Presents the populations of Turin and Genoa separately. XIII. Shows the proportionate distribution of the living according to ages, on the base of 1,000,000. And XIV. Exhibits the progress of the population by the results in each province of the censuses severally made in 1819, when the grand total was 3,419,538; in 1824, when it was 3,674,707; in 1830, when it was 3,992,490; and in 1838, when it was 4,125,490; being an increase from the first period of 19 per cent. The total population of the

kingdom of Savoy, including 524,635, the estimated number of inhabitants in the island of Sardinia, is therefore 4,650,370.

TUSCANY.

Two letters from Count Serristori show that the Tuscan system of enumeration somewhat resembles that of Sweden, described by Colonel Forsell; the curés making annually a return for each commune to a central office at Florence, organised in 1817. Duplicates of the parish register notices are sent more frequently. But the detail comprised in the returns is by no means so extensive, nor is it so laboriously digested, as that contributed to the "Table Commission" of Stockholm.

UNITED STATES OF NORTH AMERICA.

The sixth decennial census of the United States of North America is to be made in the present year (1840); and an Act of Congress in 1839 provided for its execution upon the same system which has been adopted on former occasions. The marshals of the several districts, in consideration of a compensation awarded to them by that Act, are made responsible for its execution; and are required to appoint assistants for the actual enumeration, and to assign their districts; obeying in these proceedings the instructions to be conveyed to them by the Secretary of the Department of State. The enumeration is to be by families, under the *name* of the head of each, and is to be completed between the 1st of June and the 1st of October, under penalty, by inquiry at each habitation, or from the head of each family personally. At the latter date two copies of the enumerations in full are to be delivered by the assistants to the marshals, who are to file one copy (with an attested statement of the aggregate amount) with the clerks of their districts; and before the 1st of December to send one copy to the Secretary of State. The filed copy, after examination by the grand jury, is also to be transmitted to the Department of State. Payment to the enumerators is to be made at the rate of two dollars for every 100 persons by them returned, when such persons reside in the country; but when their residence is in a town containing more than 3,000 inhabitants, they will receive only at the same rate of two dollars for every 100 persons for the first 3,000, and then at the rate of two dollars for every 300 persons over 3,000. Where, on the other hand, from the dispersed situation of the inhabitants in some divisions, two dollars will not be sufficient for the labour of enumerating 100 persons, the marshals, with the approbation of the judges of their respective districts or territories, may make such further allowance to their assistants as shall be deemed an adequate compensation, so that it never exceed six dollars for every 50 persons by them returned.

The enumeration is to distinguish the free white persons from the free coloured persons and slaves; and in each class to ascertain the age and sex, and to mark those who are deaf and dumb, blind, insane, or idiots, and such of the latter as are a public charge. The ages of the whites, generally, are to be classed, at the time of enumeration, under 5 years, 5 to 10, 10 to 15, 15 to 20, 20 to 30, 30 to 40, 40 to 50, 50 to 60, 60 to 70, 70 to 80, 80 to 90, 90 to 100, and 100 and upwards: and those of the whites who may be deaf and dumb, under 14, 14 to 25, and 25 and

upwards. The ages of the coloured and slaves are to be classed under 10 years, 10 to 24, 24 to 36, 36 to 55, 55 to 100, and 100 and upwards. The census is also to present a return of all persons receiving pensions from the United States for revolutionary or other services. Those who are only temporarily absent from their usual place of abode are to be registered at the place of such usual abode, and not at that of their temporary sojourn; but those travelling without fixed abode are to be enumerated at the places where they may be on the first day of June. All free persons 16 years of age and upwards are bound to give true answers to the enumerators under a penalty of 20 dollars, one half to the enumerator and the other to the State. The enumerators are to set up a schedule of the population within their respective divisions, in two of the most public places, and to receive five dollars for each.

Not only is the Secretary of State empowered to issue the several regulations and instructions requisite for the enumerations above stated, but the marshals and their assistants are required "to collect and return in statistical tables, under proper heads, according to such forms as shall be furnished, all such information in relation to mines, agriculture, commerce, manufactures, and schools, with a view to exhibit a full view of the pursuits, industry, education, and resources of the country, as shall be directed by the President of the United States. And it shall be the duty of the Secretary of State, under the direction of the President, to prepare such forms, regulations, and instructions as shall be necessary and proper to comply with the provisions of this Act."

Of the forms proposed for use in this census, that for the actual enumeration by heads of families proposes, under the last ample provision of the Census Act, to obtain information in seven additional columns on the subject of "occupations;" and in eight other columns on the subject of schools and colleges; making the total number of columns on the enumeration table no fewer than *eighty*. The *occupation* columns are to show the number of persons in each family employed in, 1, mining; 2, agriculture; 3, commerce; 4, manufactures and trades; 5, navigation of the ocean; 6, navigation of canals, lakes, and rivers; 7, learned professions and engineers. Those on the subject of *instruction* propose to exhibit the number of universities and of their students; the number of academies and grammar-schools, and of their scholars; the number of primary and common schools, and of their scholars; the number of scholars at public charge; and the number of white persons above 20 years of age in each family who cannot read and write.

Another schedule, of *two hundred and sixteen* columns, proposes to obtain a return of the mines, agriculture, commerce, manufactures, &c., of each enumerator's division; but most of these columns, so far from admitting of statements obtainable by a single question, demand the results of a lengthened investigation, with unlimited powers, which, had such powers been granted, it would be impossible for any single enumerator to accomplish. This schedule presents, in fact, a singular instance of the want of distinction between the processes of *collection* and *abstraction*; for it proposes to collect with accuracy masses of facts in a form adapted only to their ultimate, condensed, and verified expression. A similar attempt was made in connexion with the United States census of 1820, and entirely failed, as must the present, perhaps

after considerably endangering, or actually injuring, the enumeration of inhabitants.

GREAT BRITAIN.

Four enumerations, at decennial intervals, have been made of the population of Great Britain. The machinery adopted by the Act "for taking an account of the Population of Great Britain, and of the increase or diminution thereof," in 1801 (41 Geo. III., 31st Dec., 1800), has been used at the three subsequent decennial periods, with scarcely any alteration. In England, the overseers of the poor, or, in default of such officers, some substantial householder of every parish and place; and in Scotland, such persons as were appointed by the sheriff deputies, steward deputies, and justices (commonly the parish schoolmasters), were required to take an account of the number of persons found within each parish and place, and to set down the totals, according to the form of a schedule remitted to them. The clergy of the Established Church were, at the same time, required to make a return of the number of baptisms and burials in their respective parishes in the several years 1700, 1710, 1720, 1730, 1740, 1750, 1760, 1770, 1780, and in each subsequent year, to the 31st day of December, 1800; distinguishing males from females, as prescribed in schedules remitted; and likewise stating what was the number of marriages in their several parishes in each year from 1754 to the end of 1800, to be stated in a form exhibited in the same schedules.

Copies of the Act and schedules were sent by the King's printer to the clerks of the peace and town clerks throughout Great Britain, who distributed the Acts to the justices at the Epiphany sessions, 1801. In *England* the same officers gave the schedules to the high constables, who delivered the forms for the parish register abstracts to the parochial clergy, and those for the enumeration of the living, to an overseer or substantial householder of each parish or place, who, with the assistance of such other of the parish officers as he chose to call to his assistance, proceeded, on the 10th of March, 1801, to take an account in writing of "the number of persons at that time being within the limits of each parish, township, or place respectively." These enumerators proceeded "together or separately, from house to house, or otherwise, as they judged expedient for the better execution of the Act," and, from information so collected, "prepared answers or returns to three questions put to them, according to the form prescribed in the schedule which they had received;" all who refused to answer the necessary inquiries put by them, or who made false answers, being subjected to a penalty of not more than five pounds, nor less than forty shillings, at the discretion of the justices before whom complaint should be made. Having accomplished their labour, the overseers or householders attended at a meeting of the justices of their district, appointed for some time between the 10th and 30th of April, 1801, to deliver to them their returns, on oath, as to their accuracy; and by the justices they were handed back to the high constable, who endorsed them, and transmitted them to the Clerks of the Peace and Town Clerks, from whom they had severally received them, by the 8th of May, 1801, to be transmitted, before the 15th of that month, to the Secretary of State for the Home Department.

In *Scotland*, at meetings of the justices held before April 30th, on

he sheriffs-depute, the schoolmasters or other fit persons were appointed to take the census in each parish or place, and to them the clerks of the peace at once delivered the schedules requisite for their returns, to the filling of which they proceeded in the same manner, and with the same authority, as the overseers in England. Their returns they presented to meetings of the magistrates, called by the same authority as those for their appointment, between June 1st and Michaelmas; and here receiving these returns on oath as to their correctness, the sheriffs-depute returned them to the clerks of the peace, who were to transmit them to the Secretary of State for the Home Department before the 10th of November. The several original accounts taken in each parish or place were deposited with the churchwardens and the parish schoolmasters in England and in Scotland respectively.

In payment for these services under the Population Act, the Clerks of the Peace and Town Clerks received a fee of 1s. for every return; the high constables, 1s. 6d., and the clerks to the justices, 1s., to be paid out of the county rates; and the justices at quarter sessions allowed to the overseers, &c., in England, and the schoolmasters, &c., in Scotland, "the amount of any reasonable compensation for trouble and expenses which they were satisfied had been *bonâ fide* and necessarily incurred in the execution of this Act." The latter expenses were, by the Act of 1800, to be paid by the Receivers-General out of the land-tax throughout Great Britain; but by that of 1811, and the subsequent population acts, they are directed to be defrayed in England out of the poor's-rates of the respective parishes and places. The like penalties as upon inhabitants for refusal of answers are imposed for wilful defaults on the part of the enumerators.

The queries to be answered from the parish registers applied only to England, and the clergy transmitted their returns to the bishops, who forwarded them to the archbishops, by whom they were laid before the Privy Council, for the preparation of an abstract. And by the Act for each subsequent census, a continuation of these returns for the preceding ten years has been required. The chief application of these returns contemplated by the Act of 1801 was to estimate the population during the preceding century; but in 1830 was added a request for the ages of the interred for the preceding eighteen years, in the belief that these data would suffice for determining the law of mortality.

For the actual enumeration of the living, it will be perceived that no method or system was in the first instance, nor has it ever since been, prescribed; the schedules transmitted to the overseers and schoolmasters being merely the forms in which they were to express the *results* of the enumeration, which, in each parish, they might make in whatever method they should think best. When the very various intelligence and character of the agents, the absence of all central control over their proceedings, and the opening for negligence which the whole system, or rather want of system, presents, are taken into consideration, it can scarcely be imagined that any very great exactitude has been obtained in the enumerations that have yet been made. Indeed, no system of enumeration appears to have been even recommended until the last census in 1831, when pencil marks on a line, one stroke for each individual, was the method proposed. Nor has any one of these enumera-

tions accomplished, with any approach to accuracy, more than a limited portion of what it attempted.

In 1801 the overseers and schoolmasters were required to return, for their respective parishes, townships, and places, the following particulars, numerically stated:—

Place. Parish, township, &c., and in what superior divisions.	Houses.			Persons.		Occupations.			Total of persons.
	Inhabited.	By how many families.	Uninhabited.	Male.	Female.	Persons chiefly em- ployed in agricul- ture.	Persons chiefly em- ployed in trade, manufactures, and handicrafts.	All other persons not comprised in the two preceding classes.	

But the only particulars which were intelligibly returned, with such accuracy as the means above indicated could supply, were, the number of males and females respectively, and of both sexes jointly. What should be reckoned a "house" was variously understood; the term "family" was so variously interpreted that no reliance could be placed on the figures returned; in the number of uninhabited houses those building were not distinguished from the very different class of other houses uninhabited; and the questions as to occupation were so variously conceived (not only in regard to what was meant by the terms "agriculture," &c., but as to whether all the individuals of a family dependent on those engaged in each branch of industry were to be inserted), that the answers in these columns also proved utterly valueless. To avoid this failure in 1811, the three questions demanded of the overseers and schoolmasters were increased to seven, requiring the houses building to be distinguished from the uninhabited houses, and the number of *families* chiefly employed in agriculture and trade, respectively, to be returned.

The returns of 1821 required precisely the same particulars; but in the list of the seven queries was added a request that the enumerators should obtain the ages of individuals, if, in their respective opinions, they could do so in a manner satisfactory to themselves and not inconvenient to the parties; classifying the ages of males and females separately, quinquennially up to 20, and then decennially up to 100, with those who were above 100 specially noticed. In answer to this request, the ages of no less than *eight-ninths* of the entire population of Great Britain were returned so classified by the enumerators, to whom it is to be supposed a greater allowance was made by the magistrates for their trouble than on former occasions. The results of this classified return of ages form a

considerable and valuable portion of the printed population abstracts of 1821; but it was omitted from the census of 1831, on the ground, that "in so far as the ages of existing persons may be supposed to establish the duration and consequently the pecuniary value of insurances on human life, the inquiry is needless, as the ages at which nearly 4,000,000 of persons have died in England and Wales during 18 years (1813-30) will establish this in a direct and positive manner;" a very grave error, which was acted upon the more readily since "a repetition of the question regarding the ages of persons seemed to preclude any new and more particular questions as to *occupations*; for the machinery would break down if loaded with both these minute inquiries, super-added to the simpler questions of 1801 and 1811."* The very inaccuracies ascribed to the classification of ages in 1821 were also used as an argument for the entire omission of the ages of the population in 1831, instead of being the main ground for their continuance, with an endeavour to procure greater accuracy.

"That part of the Population Act which requires an enumeration of the inhabitants of Great Britain," it was stated by Mr. Rickman, Clerk-assistant of the House of Commons, by whom the digest of each successive set of returns has been ably made, "is secure of efficiency in England (especially in the southern counties) from the poor-relief system; the overseers of the poor, who are employed in the enumeration, being officially cognizant of every individual, and of the number of children of every individual, who, from poverty and consequent obscurity, may be supposed often to escape particular notice in other nations. But these overseers, who seem to have put themselves in motion with much alacrity since the first enumeration of 1801, must not be deemed an educated class of men; the great majority of them are occupiers of land who fill the office by turns in their respective parishes; who answer plain questions with much sincerity, but to whom difficult questions cannot be propounded without incurring the risk of retrograding instead of advancing in knowledge; that is, of arriving at misinformation instead of resting in acknowledged ignorance."† "My large experience in the complex Poor Rate Returns for 1803 has but too surely convinced me that the more questions you put to 16,000 individuals, the less chance you have of valuable information."‡

It would scarcely be thought that these very just remarks were preliminary to an extension of the number of questions addressed to these very overseers from seven to *sixteen*; demanding of each individual overseer the greatest clearness of apprehension and vigilance of execution. The following copy of these questions will exhibit the whole local system of the last census of the population in Great Britain, under the 11th of George IV. cap. 30.

SCHEDULE.

QUESTIONS to which, by directions of an Act passed in the eleventh year of the reign of His Majesty King George the Fourth, intituled "An Act for taking an

* Mr. Rickman, Evidence before Population Bill Committee, sess. 1830, (385, pp. 3, 4.

† Evidence before Population Bill Committee, 1830, p. 1.

‡ Letter to Mr. Friend, *ibid.* p. 5.

Account of the Population of Great Britain, and of the Increase or Diminution thereof," written answers are to be returned by the rector, vicar, curate, or officiating minister, and overseers of the poor, or by some other substantial householder of every parish, township, and place (including those places also which are extra-parochial) in England; and by the schoolmasters, or other persons to be appointed under the said Act, for every parish and place in Scotland: signed by them respectively, and attested upon oath or affirmation by the said overseers, or by such other substantial householders as aforesaid in England, and by the schoolmasters or other such persons as aforesaid in Scotland.

Questions addressed to the Overseers in England, and to the Schoolmasters in Scotland:

Who are respectively required to take an account of the resident population, by proceeding from house to house on the thirtieth day of May one thousand eight hundred and thirty-one, and on the days immediately subsequent thereto, if one day shall not be sufficient; and they are also required to specify in writing the name of the parish or place in the Schedule, and whether it be usually called a parish, township, tything, quarter, or by what other denomination.

1st. How many inhabited houses are there in your parish, township, or place; and by how many families are they occupied?

2d. How many houses are now building, and therefore not yet inhabited?

3d. How many other houses are uninhabited?

4th. What number of families in your parish, township, or place are chiefly employed in and maintained by agriculture, or by trade, manufacture, or handicraft; and how many families are not comprised in either of the two preceding classes?

N.B. The total number of families in answer to this question must correspond with the number of families in answer to the first question; and if any doubt shall arise as to the class in which any family or families ought to be comprised, such doubt is to be stated as a remark (under question sixteenth), not omitting therein to specify in which class such family or families may have been comprised in your answer to the fourth question.

5th. How many persons (including children of whatever age) are there actually found within the limits of your parish, township, or place, at the time of taking this account; distinguishing males and females, and exclusive of men actually serving in His Majesty's regular forces, or in the militia, and exclusive of seamen, either in His Majesty's service or belonging to registered vessels?

6th. How many of the males enumerated in answer to the 5th question, are upwards of twenty years old?

N.B. If this number of males upwards of twenty years old should differ [materially or otherwise as compared to the Return of 1821] from one-half of the total number of males [in answer to question 5th], some error has probably been committed, and the answer to this question should be examined, and corrected, if necessary.

7th. How many males upwards of twenty years old are employed in agriculture, including graziers, cowkeepers, shepherds, and other farm servants, gardeners (not taxable as male servants), and nurserymen?

In answering this question, you will carefully distinguish these males into three classes; viz. first, occupiers of land who constantly employ and pay one, or more than one labourer or farm servant in husbandry; secondly, occupiers of land who employ no labourer other than of their own family; thirdly, labourers in husbandry and farm servants employed by occupiers of the first class.

8th. How many males upwards of twenty years old are employed in manufacture, or in making manufacturing machinery; but not including labourers, porters, messengers, &c., who are to be included in a subsequent class?

9th. How many males upwards of twenty years old are employed in retail trade or in handicraft, as masters, shopmen, journeymen, apprentices, or in any capacity requiring skill in the business; but not including labourers, porters, messengers, &c., who are to be included in a subsequent class?

N.B. To enable you to answer this question in a manner satisfactory to yourself, a sheet containing a list of the denominations of several trades is transmitted here-

with, with blank spaces for your use in entry of the answers you obtain; it being understood that if any trade or business carried on in your parish or place does not appear in the printed list, you will specify such trade at bottom of the said list, making a mark for each male opposite to the denomination of his proper trade or business, and adding all together for final entry in the Schedule; to which Schedule you will annex the said printed list, with your original entries thereon.

10th. How many males upwards of twenty years old are wholesale merchants, bankers, capitalists, professional persons, artists, architects, teachers, clerks, surveyors, and other educated men? And in answering this question, you will include generally persons maintaining themselves otherwise than by manufacture, trade, or bodily labour.

11th. How many males upwards of twenty years old are miners, fishermen, boatmen, excavators of canals, road-makers, toll collectors, or labourers employed by persons of the three preceding classes, or otherwise employed in any kind of bodily labour, excepting in agriculture? Labourers in agriculture having been already entered in the proper place.

12th. How many other males upwards of twenty years old (not being taxable servants under the next question) have not been included in any of the foregoing classes? Including, therefore, in answer to this question, retired tradesmen, superannuated labourers, and males diseased or disabled in body or mind.

13th. How many household servants, including all female servants, and such male servants (of whatever age) as are taxable as such; also waiters and attendants at inns; distinguishing the males upwards of twenty years of age, from the males under twenty years of age?

N.B. Observe that the number of males, in answer to questions 7th, 8th, 9th, 10th, 11th, 12th, and 13th collectively, cannot be less than the number of males upwards of twenty years old, in answer to question 6th; but will exceed that number in consequence of including male servants under twenty years of age; and, as a general rule, always assign an individual of mixed occupation or income to that by which he is supposed to profit more than by any other.

14th. If you have entered any males in answer to the 8th question, be pleased to specify the manufacture or manufactures in which they are employed; and what proportion of the number of those entered in answer to question 11th are employed in any quarry, mines, coal pits, fishery, or public work now in progress?

15th. Referring to the number of persons in one thousand eight hundred and twenty-one, to what cause do you attribute any remarkable difference in the number at present?

16th. Are there any other matters which you may think it necessary to remark in explanation of your answers to any of the preceding questions?

That no greater measure of success attended the exercise of the complicated functions here assigned to the several overseers is not surprising. They had for their purpose to exhibit a summary of the multifarious pursuits and subdivisions of an intricate society; but the attainment of so desirable an object is almost as distant as ever; nor will it be attempted to deduce such a summary from the materials thus collected. It was obviously calling upon large numbers of persons of limited intelligence to exercise a refinement in nomenclature and classification, to which a great proportion of them must have been quite incompetent, however capable and willing to supply the individual facts.

IRELAND.

The Irish census of 1821 appears to have been by far the most perfect in its machinery and method of any that has yet been executed in these islands. It was made under an Act passed in 1815, after the failure of one attempted under a previous Act of 1812. The latter was chiefly copied from that of 1810, for taking a census of the population in Great Britain, "to the provisions of which it adhered in all the practical

details more closely than the different circumstances of the two islands would justify. At the expiration of two years employed in endeavouring to accomplish the object of the Legislature, it was found, on examining the returns, that out of the 40 counties, or counties of cities and towns, into which Ireland is divided, 10 only furnished complete returns; in 4 no steps whatever were taken in pursuance of the Act; and those of the remaining 26 were inaccurate or defective. The Act, therefore, may be considered to have been wholly inoperative as to its main object, that of ascertaining the number of souls by actual enumeration.*

“The Population Act, passed in 1815, was framed with a view to obviate the defects discovered by experience in the former. The chief differences between them are as follows:—The duty of superintending the general management of the proceedings throughout the counties was transferred from the grand juries to the bench of magistrates assembled at sessions. By this arrangement, as most grand juries are magistrates, the benefits derivable from the exertions of persons of high rank and extensive influence were still secured, while an additional number was added, whence the co-operation of persons of intelligence and respectability, whose inclinations led them to direct their attention to pursuits of this nature, and who would otherwise have been excluded, might reasonably be expected. The meetings at quarter sessions assured permanence and uniformity to those exertions, particularly as, in Ireland, the deliberations of the bench of magistrates, in every county, are aided by the advice of a permanent legal coadjutor, selected from among the practising barristers. The assistance of this functionary was found to be serviceable not only in aiding the magistrates by his legal advice, and in preserving stricter uniformity and consistency in the proceedings of the bench, but also as being a valuable organ of communication between the government and the counties, on unforeseen or doubtful points. The *enumerators*, whose nomination was vested in the bench of magistrates, were authorised to ascertain the *name, age, and occupation* of every individual within their several districts; and instructions were given to the bench of magistrates to give a preference, in the nomination, to the persons usually employed in the collection of the local taxes, from a conviction that their habits of life gave them superior advantages, in consequence of their acquaintance with the people, and with the minute subdivisions of the county. Uniformity in the details throughout the several counties was secured by a provision requiring that the whole process should be conducted according to instructions issued from time to time from the chief secretary’s department to the bench of magistrates, through the assistant barristers of each county, and recorders of counties of cities and counties of towns respectively.”†

The annexed is a specimen of the manner in which the particulars were to be entered in the note-books used by the enumerators in their progress from house to house; and a precise copy of which, entered in printed forms provided for the purpose, was sent on the completion of their labours, after examination by the magistrates at a special session, to the office for digesting the returns in Dublin:—

* Preface to the Irish Population Abstracts of 1821, p. vii.

† Preface to the Irish Population Abstracts of 1821, pp. viii. ix.

No. 1.—Townland of Ballykeel, in the parish of Dummora, barony of Castletown, and county of Cork.						
Col. 1. — No. of house.	Col. 2. — No. of stories.	Col. 3. — Names of inhabitants.	Col. 4. — Ages.	Col. 5. — Occupations.	Col. 6. — No. of acres.	Col. 7. — Observations
1	3	William Jenkins .	28	Woollen draper	..	..
		Mary Jenkins, his wife	25	..	..	..
		Peter Dillon . .	13	Apprentice .	..	..
		Samuel Underwood	40	House servant	..	..
		Bridget Wilkins .	50	House servant	..	..
2	1	Peter Willoughby	64	Farmer & linen weaver.	12	..
		John Willoughby, his son	32	Linen weaver	..	..
		Jane Willoughby, his wife	26	Flax spinner	..	..
		Terence Willoughby, grandson	5	..	..	..
		Jane Willoughby, grand-daughter	2	..	..	..
		Deborah Simpson	68	Wool spinner	..	Holds 18 acres in the townland of Seaville, in this parish.
		James Jackson .	42	Out-door servant to Wm. Jenkins.	..	..
		Mary Young . .	45	Wool spinner	..	..
4	2	Uninhabited . .	..	..	..	..

“ It is to be observed that no place was appropriated in the note-books for specifying the number of families. This omission rested on the principle above stated, of confining the enumerator’s attention to matters of fact, and of excluding everything depending on opinion or inference; as it was conceived that this branch of the process could subsequently be more safely executed on a uniform principle, by the persons entrusted with the duty of arranging and digesting the original returns made by the enumerators.” * Minute instructions were conveyed to them for their guidance in every branch of their duties, and every difficulty which they found was explained or removed on application to the chief secretary’s office. “ The original returns, therefore, now lodged for preservation and reference in the Record Tower of Dublin Castle, contain the following particulars:—1st. The name and situation of every townland, subdivision of townland, or other smallest territorial district throughout Ireland, classed according to its parish, barony, and county, with the extent of the townland in many cases. 2d. The name of every town, village, and hamlet, in each county, with, in most cases, the number of houses in each. 3d. The name and situation of every street, square, lane,

* Preliminary Observations, p. xi.

alley, court, or other combination of houses, in cities and corporate towns. 4th. The number of dwelling-houses in Ireland, whether inhabited, uninhabited, or building, together with the number of stories in each. 5th. The number, names, and situation of all public buildings in Ireland, such as places of worship, whether perfect or in a state of decay, barracks, school-houses, hospitals, infirmaries, lunatic asylums, prisons, mills, stores, &c. &c. 6th. The name, age, and occupation of every individual residing in Ireland at the time of taking the census. 7th. The number of families into which those individuals are combined. 8th. The relationship by which the several members of each family are connected with each other, whether as kinsmen, apprentices, journeymen, servants, &c. 9th. The quantity of land held by every individual in the townland in which he is resident. And, 10th. The number of schools throughout Ireland, with the number of pupils in each, distinguishing between males and females, and, in most instances, specifying the names of the teachers, and the foundations on which they are maintained." These various particulars were reduced to a tabular digest, from which was extracted the "Abstract of Answers and Returns," presented to Parliament, which contains only the same items of information that are comprised in the English abstract for 1821, with the addition of the schools and school attendance in each parish and place.

The Act for Enumerating the Population of Ireland in 1831 simply reinstituted the like machinery, which was to supply the same information demanded by the Act for numbering the Population of Great Britain. This census was taken by *names*, as on the previous occasion; but the abstract of its results, arranged precisely like that of the British census of 1831, is unaccompanied by any observations explanatory of its peculiar features, or describing the progress and character of the labour. The total cost of the census of 1821 was 34,052*l.* 3*s.* 9*d.*, or about 10*s.* per 100 inhabitants, which is a little more than the price paid in America for the first process of enumeration from house to house alone, of a rural population. Of that of the census of 1831, no return has been published; but since it has been made, the purposes of the State have demanded an express census of the religious persuasions of the population, taken by a special commission appointed for the purpose.

COVENTRY INDUSTRIAL CENSUS.

The Coventry industrial census submitted by Mr. Joseph Fletcher, Secretary to the Hand-loom Inquiry Commissioners, was made, under his direction, for the purposes of that Commission, and contains, in 17 MS. books, the name of every street or place in that city, and its suburbs, where weavers reside; the name of every weaver, with the sex and age of each member of his family; the trade condition of each, whether master, journeyman, or indoor or outdoor apprentice; the total number in each family; the masters for whom they work; what members of each family are weaving; upon what kind of loom each works; what kind of work each is producing; and the persons in each family who are making earnings otherwise than at the loom. These papers have furnished materials for 17 interesting tabular abstracts, contained in Part IV. of the Hand-loom Inquiry Commissioners' Reports. This limited census, comprising a total of 9,281 souls, employed in its execu-

tion six men for eight days; cost only 10*l.*; and affords, perhaps, some criterion of the cost of a good national census, which, though it would not comprise the same, should collect about the like amount of detail.

SUGGESTIONS CONCERNING THE CENSUS OF THE UNITED KINGDOM IN 1841.

The Committee hope that these more important features of the information collected for the guidance of their own judgment, so far from being deemed irrelevant, will show by comparison the defects in the system of enumeration heretofore adopted in Great Britain, and furnish ground for gratulation, that, since the date of the last census, an agency has been created, by the re-organisation of our systems of Poor-law administration and Registration, which possesses nearly every quality desirable for the future execution of such a labour. The British Population Abstracts have heretofore presented not the results of a national census, but merely a summary of parochial censuses, made on whatever variety of systems the agents for each thought well to adopt, and liable, therefore, to inaccuracies, such as Dr. Heysham has pointed out at Carlisle. Nor is this observation directed to the disparagement of those efforts by which it has been endeavoured to obtain, by the means heretofore used, some few important results, expressed in uniform terms; but merely to point out the want of authority which attaches to the method in which these data must have been collected, and the impossibility of obtaining by it accurate returns to questions so intricate as those addressed to the enumerators by the last Population Act. The clerks of the peace and high constables had merely to deliver the forms, and receive them back filled up with such totals as the enumerators should certify on oath before the magistrates to be correct; and however deficient their method of enumeration might be, they must send in figures which were correct to the best of their belief. Still some instances occurred in which, prompted only by a public interest in so important a subject, many of the principal inhabitants of a town lent their assistance to the overseers,*—a spontaneous movement deserving of every encouragement; for it tends to give to the returns made by any agency a completeness and accuracy which must in vain be hoped where such stimulus is not applied. Yet, so far from the old machinery of the census for England presenting facilities for such useful co-operation, the office of overseer is now reduced from its former imperfect efficiency to be little more than that of a rate collector annually changed, whose functions in the relief of the poor, which heretofore gave him peculiar qualifications, are now chiefly transferred to the relieving officer, a practised and permanent agent.

The means of obtaining a full, correct, and well-digested census of the inhabitants of *England* in 1841, are now supplied by its new Poor-law administration, and the general Registration of births, deaths, and marriages. The constitution and purposes of these departments, the machinery of which is in some respects united, seem at once to point them out as those to which the making of this census may most conveniently be confided; each board of guardians comprising, *ex-officio*, the acting

* *Edinburgh Philosophical Journal*, vol. viii. p. 45, note.

and resident magistrates of the union, and, as representatives, its other chief proprietors and occupiers; while its clerk is generally *ex-officio* superintendent registrar for the union, and its relieving officers, in whom are now vested many of the former administrative duties of the overseers, are, to the number of some hundreds, also registrars. The unpaid officers for the local administration of the poor laws amount to nearly 20,000, and present the only available means of intelligent supervision; while the paid officers for the same department of the public service, including the assistant commissioners, clerks of the guardians, auditors, paid collectors, medical officers, &c., form a body of upwards of 7,000. In the divisions which they adopt, the poor-law and registration departments present a comparatively equal distribution of means according to population and area (especially the 2,193 registrars' districts), quite unapproached by any older divisions. Great advantage would also result from the enumeration of the living being entrusted to the same persons, and made according to the same districts, as the registration of the births and deaths; the parties charged with the latter possessing more knowledge of the population than any other class of individuals, and being already accustomed to a system which will have prepared them for such a labour as that of enumeration.

The statutory co-operation of the Poor Law Commissioners and the Registrar-General, under the sanction of the Secretary of State for the Home Department, appears therefore essential to obtaining, by means of the next census, a series of statistical observations which shall be equally valuable for purposes of administration and of science; a co-operation which should extend not only to the superintendence of its local execution under their immediate instructions, but to that also of the abstraction of its results, for which the system and duties of their offices must give them peculiar qualifications. For local superintendence the Boards of Guardians themselves would be found very efficient. The officers of these boards would be the principal agents employed; and it is to be hoped that these bodies, feeling the importance of the trust devolved upon them, would neglect no opportunity of inviting the co-operation of the men of scientific acquirements and public spirit who are resident in their respective districts, and who would gladly contribute, by suggestions and verification, to the correctness of its discharge. It may be confidently expected, indeed, that wherever gentlemen of the medical profession, and others feeling a scientific interest in the success of the census, are willing to contribute their aid, the Boards of Guardians would lend them every encouragement; and the enumerations of peculiar accuracy thence resulting, being especially made known to the central office, would become the subject of express attention in the study of vital statistics, in connexion with the registration of births and deaths, in those places. Through this means, indeed, abundant materials of the nicest accuracy might be obtained for determining the laws of mortality among every class of our population (though heretofore such attempts have been subject to the most formidable doubts and difficulties), while even the ordinary rate of accuracy would be perfect compared to any that can yet have been attained. Whatever districts have not yet been reduced into unions for poor-law administration, have been divided into districts by the Poor Law Commissioners for the registration of births and

deaths; and of these, as many as it seemed fit to the Registrar-General to place under one superintendent-registrar have been comprised in a superintendent-registrar's district. Thus in those parts of England and Wales which are not yet under the operation of the Poor Law Amendment Act, the superintendent-registrar's district holds, as a territorial division, the place of the poor-law Union. Within such superintendent-registrars' districts it will perhaps be found most convenient to entrust the resident and acting magistrates of the district or division with the powers for a census which are elsewhere given to the Boards of Guardians. They here form the only uniform and all-pervading local authority for superintendence, in like manner as the registration department in the same districts affords the only executive agency of analogous character; and the superintendent-registrar of such Unions should therefore be required to perform, for the purposes of this labour, the duties which elsewhere devolve upon the clerks of the guardians.

The latter officers, who form a very respectable and efficient body, claim, in their double capacity of superintendent-registrars and poor-law officers, to be the highest active agents in the labour of a census, over which they would be able to exercise an effective surveillance, in lieu of the mere issue and reception of schedules and returns which have formed the duties of the clerks of the peace and the high constables of hundreds in the former enumerations. In return for a sufficient remuneration, they might, indeed, be made responsible for the due execution of the whole, within their respective Unions; and any trifling with this responsibility would be checked by their being under the observation not only of the several Boards of Guardians, whose servants they are, but also under that of the Assistant Poor Law-Commissioners. The actual enumeration, under this superintendence and responsibility, might be accomplished by agents expressly appointed by the several Boards of Guardians, which, comprising representatives from each parish and place, could readily estimate the time and force necessary for its completion in each. But it should at the same time be entrusted, to the fullest extent possible, to those whose habits and duties peculiarly qualify them for the office; and it would therefore be well to require of the several boards to allow a refusal of the employment in some one or more of the parishes or places which are to have a separate enumeration, to the several stipendiary relieving officers, to the registrars, and to the paid collectors of rates and assistant overseers appointed by Boards of Guardians within the several Unions;—a regulation which should extend as well to the Unions for registration purposes only as to those for poor-law administration. The districts which must be adopted for separate enumeration are already marked out, by the ancient ecclesiastical and civil division of the kingdom, into parishes and places supporting their own poor; but where such ancient integral portions should comprise so large a population as to form more than one district for the purposes of the registration of births and deaths, the importance of comparing the results of this census with those of such registration demands that each registrar's district should be separately enumerated.

In *Scotland*, there having been no such re-organisation of the whole parochial system as has been effected in England, the method pursued in making previous enumerations admits perhaps of little improvement, beyond subjecting the enumerators to the instructions to be issued under

the Secretary of State's authority from the central office of the census in London.

In *Ireland*, if the new poor-law machinery be yet incomplete, or unprepared to be loaded with unusual duties, resort can still be had, under vigilant control, to the special agency which has twice been employed, or to the police.

These are the principal considerations which occur to this Committee in searching for the combination of machinery which shall be most effective in accomplishing the great work of a national census; and before suggesting the heads of information which it seems most important to collect, they beg to state their deep conviction, derived from the experience of the Continent as well as of the British Islands, that the only security against fallacious returns is the system of enumeration *by names*, as pursued on the Irish census, both in 1821 and in 1831, and *not by mere marks*, which open the door for every kind of error and fraud, but appear to have heretofore been universally used in Great Britain, by the undirected agency of the overseers, &c. Whatever particulars are required concerning each individual, the name of each should appear in the note-books used by the enumerators, to be kept as a public record in each parish or union; while a clear copy should be entered in printed forms especially provided, and, after due verification, be forwarded to the Secretary of State's office, to be abstracted in the central office of the census. It is obvious that this arrangement is essential to accuracy, and that any attempt at the correction of imperfect returns without it, is hopeless.

The Committee conceive that a census to be made by Government, extending, as in every country it has been extended, beyond a mere counting of heads, contemplates various purposes besides the mere ascertainment of numerical strength. Some of these concern immediate administration, such as engross nearly the whole of the Prussian census, and are entirely foreign to the province of the Committee. But a census is also generally extended to circumstances influencing the condition of the people, such as their industrial occupations; and to various facts illustrative of that condition, belonging to the field of vital statistics. It is in solicitude for the collection of the largest amount of these data, and for assuring to them a scientific correctness, that the Committee feel their appointment to the present labour to have originated.

Assuming that the Government has no administrative views in the making of a census, demanding any other fundamental items of information than those comprised in the enumerations of the people which have already been made, abundant opportunity is presented, without perhaps any augmentation of the expense necessary to the execution of a good census by names, for collecting a few classes of facts, indispensable to the solution of many of the most important problems. Thus a minute classification of the ages of the living in every locality and in every class of society is indispensable, as stated in the first report of the Registrar-General, to give to the registration of births, deaths, and marriages, its full value. The two combined would present a mass of data for vital statistics far exceeding in extent and value any which the world has yet possessed; and the collection, therefore, of the *ages* of the

living with all attainable accuracy is an object the importance of which does not admit of dispute.

The express distinction of the *sexes* at the time of enumeration is essential to avoid ambiguities which might afterwards arise, should merely the Christian name be relied upon as indicating it; and the classification of the members of each sex into the *unmarried, married, and widows or widowers*, in a census so taken as to permit of the subsequent minutest analysis of the population is most essential, and has seldom on the Continent been neglected.

Not less important are the *occupations* of a people, or, in other words, the sources from which they draw their subsistence. These are very difficult of classification, but very easy of statement in each individual case; and where the party has several known occupations or sources of income, they may all be inserted, or only one, where one is conspicuously the principal. The error of previous attempts of this kind has consisted in requiring of every enumerator to go through a laborious classification, which he was incompetent to accomplish fully, had he even been properly instructed, and presented with a good model. At present all the trades contributory solely to agricultural production are classed with manufactures, and the population engaged in them swells the contrast with the agricultural.

One other item of great simplicity it is exceedingly important next to require, as well for the use of the economist as for the correction of the vital statistics, derivable from the heads already proposed; viz., the *place of birth* of each individual, which must be specially noted whenever it is not that of present residence, as commonly it will not be, except in the case of children. The larger migrations of the people will hence receive considerable elucidation.

In the *moral* interests of the people, which may next be regarded, the most essential point of inquiry is their *religious persuasion*, which, if now omitted, may probably have to be made the subject of a specific census not less expensive than the present, as in Ireland it was a few years ago. Another principal office in moral statistics would be schools and school attendance; but this neither admits of so concise a description, nor is capable of so true an expression by numbers, since the quality of the instruction can be conveyed by no census. An accurate knowledge of the religious persuasions of its people is requisite for every state. The ascertainment of it we see to be neglected by few claiming a high rank in civilisation; and England ought assuredly not to be of that number. An enumeration of the people presents an occasion on which it is easy to command this head of information, though the statistics of "education," in the common sense of this term, must, as experience has proved, be left to special investigation to produce data of any value.

It has been thought also, by several members of the Committee, that the statistics of health, as well as vital statistics, may receive valuable elucidation from data collected with the accuracy and clearness permitted by a census by names; and to the forms of enumeration they propose therefore the addition of two columns under the general heading of *health*; one which shall present an enumeration of the "healthy," and the other of the "sick or permanently infirm;" stating through what sickness or infirmity, and, with regard to such infirmity,

whether it have been endured from infancy. The extent of incapacity for pursuing the ordinary avocations of life which may on the average prevail has never yet been ascertained, although the practical advantages derived from such information would be very great, especially in England, where a large portion of the earnings of the working classes is expended in contributions to benefit societies, for the purchase of a provision against sickness. Many of these societies have become insolvent, and serious losses have been sustained by their members, chiefly through the want of observations of sufficient extent to elucidate the laws of sickness. By the means proposed will also be obtained the number of blind, deaf and dumb, idiot, and insane, which form a special subject of enumeration in almost every other country. There is even a desire to extend the demand for information in this branch to the duration of sickness; but this, it appeared, would lead to an intricacy and delay inconsistent with the simplicity and dispatch demanded for the enumeration of a whole people, though a subject well worthy of especial investigation in selected districts for the interests of science and humanity.

If the whole of these particulars are enumerated, the enumerators' books, and the returns to the central office, will present the heads contained in the following table. (See p. 100.)

A return of the nature here described, which is one of perfect simplicity, compared to the duties demanded of the enumerators for the census of 1831, will furnish every material for abstracts which shall not only comprise all the objects contemplated by every previous census, but supply data of the utmost importance to the economist and the statesman. If the heads of information here proposed are too numerous to be sanctioned by expediency, the last of the series may successively be withdrawn, to reduce them to the narrowest compass, without militating against the main principle of a census by names. Some of the simpler processes of abstraction might be performed immediately on enumeration, under instructions from the central office, in the offices of the several Boards of Guardians, or by the enumerators themselves, with sufficient accuracy (having so ready a means of ultimate correction) for immediate returns to Parliament; a labour which would be the more readily and accurately performed, since the local authorities themselves will be anxious to obtain the most readily procurable results. Still a large amount of labour will be thrown upon the central office, in abstracting and reducing the facts returned; but whatever may be the cost, the results will be well worth the outlay; and those of each portion of the labour may appear successively, without waiting for the completion of the whole, if such an arrangement be desirable.

The labour of actual enumeration among rural populations, and those aggregated in but small numbers, can be accomplished in no form more simple or expeditious than that of the entry in books at each house of the particulars concerning its inmates. But in the towns, the method pursued in Belgium of circulating a form of queries to the master of each house eight days previous to the day of census, and on that day calling for the written answers, and filling up other forms of queries for those who were unable or had omitted, to prepare the answers, is well worthy of imitation. The answers to these queries should then be entered in an enumeration book, in like manner as though the enumeration had

Name of the Parish or Place under Enumeration, with the Hundred, County, Riding, Division, &c., in which it may be situated. The paper must be ruled horizontally with blue, so that there may be a distinct line for each individual, without danger of confusion.

1	2	3	4	5		6	Place of Birth.	Religious Persuasion	9	
In this column must be inserted the name of the street, square, or other locality in which the houses are situated, and, if they be numbered, the number of each.	In this column should be entered the figure (1) for each house necessarily enumerated, and where "uninhabited" or "unbuilt," notice.	In this column should be stated the Christian Name and surname of each inmate of the families occupying the several houses, or of some house, where there are more than one, let of a family to its head should be stated, as whether wife, child, servant, &c., and especially if only a lodger. This method, which has been pursued in England, is equally applicable to the colonies, and where each individual will be entered on a separate line; and a blank line should be left wherever the enumeration of each separate household terminates.	In this column, opposite the name of each inmate, stating that completed at the last birthday.	Sex and Domestic Condition.		Occupations.	Place of Birth.	Religious Persuasion	Health.	
Streets, &c.	Houses.	Inhabitants.	Age.	Male.	Female.				Healthy.	Labouring under serious sickness, or permanent infirmity, distinguishing the kind, the degree, and the duration, of those of "unsound mind."
High-street, No. 1.	1	William Turner, wife,	48	1	..	Draper, Master	Marlow, Bucks.	Church	1	Unsound mind
		Anne Turner, wife,	40	..	1	..	Camberwell, Surrey.	..	1	Born Blind.
		John Turner, son,	12	..	..	..	..	..	1	..
		Anne Turner, daughter,	10	..	..	..	..	..	1	..
		Edward Turner, son,	6	1	..	Draper, Apprentice	Onager, Essex.	Baptist	1	..
No. 2. No. 3. No. 4.	Uninhab. Building.	Richard Bradshaw, a apprentice ..	19	..	..	Household service,	Mold, Flint.	Presbyterian	1	..
		Mary Jones, servant,	20	..	..	..	..	..	1	..
		John Mason,	86	1	..	Farm labourer	Barking, Essex.	Church	1	..
		Sarah Mason, wife,	32	..	1	Charwoman	Epping, Essex.	..	1	..
		Richard Mason, son,	29	..	..	Master of a man	Malvern, Worcester.	Church	1	Sick.
		Edward Davis, lodger,	29	1	..	Farm labourer	Barking, Essex.	Church	1	..
		Richard Thompson, lodger	24	..	1	..	..	..	1	..

been made in this book from house to house ; and a copy of it will then be returned to the central office, as in other cases. It appears probable, indeed, that this system of queries would on many accounts prove generally more convenient to the inhabitants of towns ; and it is almost essential to the simultaneous numbering of the moving population at hotels, inns, and lodging-houses. The queries to obtain the whole of the particulars above enumerated need be only eight in number ; and the enumerator, on calling for the form, would perceive at a glance whether all were duly answered. They would be as follows :—

1. Name of the street, square, or other locality, in which your house is situated, and the number, if the houses be numbered ?

2. State your own Christian name, surname, and age at last birthday, together with those of each member and inmate of your family, with their relation to you, whether as wife, children, visitors, servants, lodgers, &c. If there be more inmates in your house than those of your own family, give the same detail of each family and individual ; a request which applies equally to the questions following as to the present.

3. What inmates of your house are married, or widowers, or widows ; giving their Christian and surname at full length ?

4. What is the occupation or source of livelihood ; the quality, profession, calling or employment, and whether as masters, journeymen, day-labourers, apprentices, &c., of the inmates of your house ; and in what occupations are the younger or female inmates, making earnings, however small or irregularly ; giving their names in full ?

5. Are any, and what, inmates natives of other places than those of their present residence ; and of what places ; stating the county in which those places are respectively situated ?

6. What is the religious persuasion, of the head of the family, or of each family ; and what that of the inmates who are of other religious persuasions ?

7. Are any, and what inmates labouring under serious sickness, or permanent infirmity ; stating their names at full length, and distinguishing the following cases of infirmity, viz. deaf and dumb, blind, or of unsound mind, and stating whether this has been sustained from infancy ?

If it should be thought advisable to collect any information respecting the occupation of land, the particulars may be most conveniently obtained from the rate-books of parishes in England, from the cess-books in Scotland, and from the rate-books or applotments of the county cess in Ireland.

Queries like these appear better adapted for collecting the first particulars of information to be supplied in a written form by the inhabitants themselves, than tabular schedules, which so large a proportion of the persons required to fill them up would be very inapt at using. And since in either case the enumerating officer must *copy* the particulars into the forms of his book, it matters little to him whether it be from queries or from tables ; so that there is no loss in increased expense of reduction. Any peculiar features of his total return the enumerator should point out by notes appended ; together with any incidental matters that appear to him deserving of notice or requiring explanation. Provision will have to be made expressly, in instructions from a central office, for the avoidance or correction of double entries, or omissions in apprehension of double entries, as also for the obviating of whatever other difficulties may be apprehended, such, for instance, as may occur with regard to the enumeration of soldiers and seamen, who ought to be included at the places where in garrison or where in port ; the totals of such enumeration being checked by the War-office and Admiralty registers. .

To accomplish the labour of such a census as is here proposed, the Act for taking it need only empower the enumerators to put the above questions, whether by word of mouth or by printed queries, and require of them, under the superintendence of the local authorities above specified, to return copies of these books to the central office, made up in the form already inserted, with the totals of the figure columns cast up. All the various methods and forms of abstraction must be devised and may be executed in the central office, and therefore need no especial enactment, since the labour will be under the control of the Secretary of State for the Home Department. The expenses of the abstraction and reduction must of course, as heretofore, be defrayed by parliamentary vote. But those of the actual enumeration should be discharged by the respective Boards of Guardians, who, under general instructions and limitations, may be allowed to make their own terms for the performance of the labour; since the due amount of remuneration must vary in every locality with the density or dispersion of the population. However varying the rates of remuneration, they should be fixed beforehand, and be made according to the number of individuals duly enumerated, and not according to the time employed. The total cost will probably not exceed that of previous enumerations; while the results of a census conducted on the system, and comprising the information, which is here suggested, will be beyond all price.

It would appear indispensable, in the forthcoming Population Act, to provide for the continuance of the parish register abstracts by the clergy in the full form prescribed in the Act of 1830.

The Committee will feel gratified, should the information and suggestions above adduced, in preparing which they have spared no diligence, be found to fulfil the purpose of their appointment by the Council. Their views with regard to the next census, for the execution of which Parliament will be called upon to provide in the current session, are submitted to the Council simply as suggestions. It is impossible that they can anticipate all the administrative considerations which may arise to make modifications of such plans appear more practically useful. And it is only in the anxiety which they feel in common with the Council and the Society at large, for the accomplishment of a great national labour in the department of Statistics in a manner worthy of the nation, that, in discharging the duties imposed by the terms of their appointment, they have submitted these suggestions for the consideration of the Council, and of the members of the Legislature, should the Council regard the results of their labours worthy of publication.

On the Effect of the New Postage Arrangements upon the Number of Letters. By ROWLAND HILL, Esq., F.S.S.

[Read before the Statistical Society of London, on Monday, 16th March, 1840.]

On the 5th December last, a postage rate of 4*d.* per half-ounce was established on all inland letters except those which had previously passed at lower rates, which continued to be carried for such lower rates; and on the 10th January last a uniform rate of 1*d.* per half-ounce was established for all inland letters, without exception, provided such rate was paid on posting the letter; if not, the charge was made double.

For the purpose of ascertaining the effect of these reductions, the number of letters delivered from the several post-offices of the United Kingdom was counted during three separate weeks,—the first before any reduction, the second during the operation of the *4d.* rate, and the third since the establishment of the *1d.* rate; and a return has just been made to the House of Commons of the number of letters for each week. Unfortunately this return includes franks, consequently it does not exhibit the increase accurately.

The numbers given in the return are as follows:—

Letters of all kinds delivered—Franks included.

	Weeks ending		
	24 Nov. 1839.	22 Dec. 1839.	23 Feb. 1840.
England and Wales.—			
Country Offices	764,938	963,616	1,658,002
London—Inland, Foreign, and Ship-Letter Offices	229,292	279,457	431,298
London District Office—Twopenny Post	258,747	340,693	406,476
Total—England and Wales . . .	1,252,977	1,583,766	2,495,776
Ireland	179,931	225,889	349,923
Scotland	153,065	199,032	353,933
Total—United Kingdom	1,585,973	2,008,687	3,199,637

Assuming the number of franks to be the same as for the week commencing January 29th, 1838, for which a return was made to the Postage Committee (Second Report, Appendix, p. 57), the corrected account will stand as follows:—

Chargeable Letters of all kinds delivered, after deducting Franks.

	Estimated No. of Franks for each of the two first weeks.	Weeks ending			Increase under the			
		24 Nov. 1839.	22 Dec. 1839.	23 Feb. 1840.	4d. Rate.		1d. Rate.	
					No.	Per cent.	No.	Per cent.
England and Wales.—								
Country Offices	56,000	708,938	907,616	1,658,002	198,678	28	949,064	134
London—Inland, Foreign, and Ship-Letter Offices	51,000	172,292	229,457	431,298	50,165	28	253,006	142
London District Office—Twopenny Post	None.	258,747	340,693	406,476	81,946	31	147,729	57
Total—England and Wales . . .								
Ireland	107,000	1,115,977	1,476,766	2,495,776	330,789	29	1,319,739	118
Scotland	21,600	158,331	204,289	349,923	45,958	29	191,597	121
	6,500	146,565	193,532	353,933	46,967	31	207,368	112
Total—United Kingdom	135,100	1,450,873	1,874,587	3,129,637	123,711	29	1,748,761	121

The number of Government letters which have become chargeable under the new arrangements is probably about 40,000 per week; if these be deducted from the last week's letters, the increase for the whole kingdom will be 118 instead of 121 per cent.

But as regards a considerable class of letters, viz., those of the old penny posts, and those of the London twopenny post, either no reduction at all or a comparatively small reduction has been made. If these letters, which may be called district post letters, be deducted, the amount will exhibit the increase on those letters which have been most affected by the reduction, viz., the General Post letters. It is true that this class includes the foreign and ship letters, on which the reduction has been comparatively small. I regret that I have not the means of estimating their number satisfactorily; there can be no doubt, however, that it is too small to influence the results very materially, at least so far as the whole kingdom is concerned.

The number of the country district post letters I have estimated partly from the return made to the Postage Committee of the House of Commons, and partly from returns which I have subsequently obtained from the Post-office.

Deducting the district post letters, the account will stand as follows:

General Post, Foreign, and Ship Letters.

	Estimated No. of Country District Post Letters.	Weeks ending			Increase under the			
		24 Nov. 1839.	22 Dec. 1839.	23 Feb. 1840.	4d. Rate.		1d. Rate.	
					No.	Per cent.	No.	Per cent.
England and Wales,—								
Country Offices .	158,000	550,938	749,616	1,500,002	193,678	35	949,064	172
London—Inland, Foreign, and Ship Letter Office.....	....	173,292	228,457	431,298	50,165	23	253,006	142
Total — England and Wales ..	158,000	729,230	978,073	1,931,300	248,843	34	1,202,070	164
Ireland ..	30,000	128,331	174,289	319,928	45,958	35	191,597	149
Scotland ..	58,000	88,565	135,532	295,933	46,967	53	207,368	234
Total — United Kingdom	246,000	946,126	1,287,894	2,547,161	341,768	40	1,601,035	169

If the 40,000 Government letters which have become chargeable be deducted as before, the increase for the whole kingdom will be 165 instead of 169 per cent.

An examination of the whole account shows that the number of chargeable letters of *all kinds* has increased 29 per cent. under the 4d. rate, and 121 per cent. (or, deducting the Government letters, 118 per cent.) under the 1d. rate, the greatest increase being in Scotland; and that the number of chargeable letters despatched by the *General Post* has increased 40 per cent. under the 4d. rate, and 169 per cent. (or, deducting the Government letters, 165 per cent.) under the 1d. rate, the greatest increase being, as before, in Scotland.

Considering that a very short time has elapsed since the reduction took place; also that an important part of the plan, viz., the use of stamps, remains still to be introduced; and further, that the facilities for despatching letters, instead of being increased, have, from the temporary necessity for closing the letter boxes early, been as yet materially diminished; perhaps the increase of letters will be thought as great, under the circumstances, as could reasonably be expected.

I regret that the returns which have as yet been made do not enable me fully to state the extent to which the post-office revenue has suffered. The returns give the amount of postage collected in London, Edinburgh, and Dublin, during the establishment of the 4*d.* rate, and for the first five weeks since the commencement of the 1*d.* rate, as well as for corresponding periods under the whole system. After deducting from both sides of the account the payments for Government offices which are stated in the returns, the loss on the *gross* revenue as indicated by these 3 towns appears to have been 29 per cent.* under the fourpenny rate, and 45 per cent. under the penny rate. The loss for the whole kingdom, however, is no doubt greater, as London, Dublin, and Edinburgh receive more than an average of foreign and ship letters. The returns do not enable me to estimate the loss on the net revenue, but it must of course greatly exceed that on the gross revenue.

It may be interesting to the Society to learn the working of the present system of optional payment. I cannot speak as to its operation in the country generally; but in London the results are as follows:—

In the District Post, the number of unpaid letters is about one-seventh, and in the General Post about one-thirteenth of the whole.

The following Memoranda have been supplied by Mr. Hill since the paper was read:—

The returns show that within the London district the average charge on General Post inland letters, exclusive of the Government letters, is almost exactly 1½*d.* per letter; and the average charge on the district post letters almost exactly 1¼*d.* per letter, from which it follows, that, by the General Post at least, a considerable number of heavy packets must be despatched.

The number of letters on any particular day is influenced very much by circumstances. In London, the average number of General Post letters is about 30 per cent. greater on a Monday than on any other day of the week. On Christmas-day last, the number of London General Post letters (outwards) fell about 70 per cent., and the number of district post letters about 80 per cent. On the 10th February (the day of Her Majesty's wedding), the first fell about 40 per cent. and the second about 25 per cent., while, on the 14th February (St. Valentine's-day), the first rose about 5 per cent. and the second about 30 per cent.

* One of the returns shows that the loss for the whole kingdom under the fourpenny rate was 31 per cent.

PROCEEDINGS OF THE STATISTICAL SOCIETY OF
LONDON.*Third Ordinary Meeting. Monday, 20th January, 1840.*

HENRY HALLAM, Esq., F.R.S., Treasurer, in the Chair.

In pursuance of notice given at the last meeting, the following distinguished foreigners were elected honorary members :—M. Ducpetiaux, Brussels; M. Villermé, Paris; M. Meidinger, Frankfort; Signor Gioja, Florence; and M. Mallet, Geneva.

The following gentlemen were elected :—Thomas Robinson, Esq., Augustus Square, Regent's Park; John Southerden Burn, Esq., Registration Commission; Samuel Stocks, Esq., Heaton Norris, Manchester; James Annesley, Esq., Albany, Piccadilly.

The following gentlemen were proposed as candidates for admission into the Society :—William Weir, Esq.; Edward Thomas, Esq.; Robert Baker, Esq., Superintendent of Factories, Leeds.

A paper was read "On the Historical, Social, Moral, and Religious Statistics of the Parish of St. George the Martyr, Southwark." By the Rev. George Weight, F.S.S. (See p. 50.)

Mr. Rowland Hill afterwards offered some statements respecting the results of the operation of the recent changes in the Post-office system, and explained several points which have been viewed as objections to its adoption.

Fourth Ordinary Meeting. Monday, 17th February, 1840.

JAMES HEYWOOD, Esq., Vice-President, F.R.S., in the Chair.

The report of the auditors of the Society's accounts for 1839, with the balance sheet of receipts and expenditure, were read. These documents are appended to the Annual Report.

The following gentlemen were elected :—William Weir, Esq., Brompton; Edward Thomas, Esq., Leicester Place; Robert Baker, Esq., Superintendent of Factories, Leeds.

The first paper read was "On the System and Extent of Pauper Relief in Scotland, prepared from official and other documents." By W. R. Deverell, Esq., Assistant-Secretary.

This paper consisted of a series of statements relating to the Scottish system of provision for the poor; the modes of collecting the requisite funds; the conditions observed in affording relief; the comparative state of the poor in Scotland, and the rates of expenditure for each individual on the whole population, with some statements of the rates of expenditure for the poor in other countries.

A second paper was then read "On the Popular Penny Literature of the Day." By C. R. Weld, Esq.

With a view of contributing to the collection of facts illustrative of the moral and intellectual condition of the working classes, copies of all the cheap periodicals published in the metropolis were presented to the Society, with a classified arrangement of the whole, exhibiting in a tabular form the title of each, the price, the length of time it has been

in circulation, and the number of copies circulated, as stated by the publishers.

These two papers may be referred to in the library of the Society.

General Anniversary Meeting, 16th March, 1840.

The Right Honourable STURGES BOURNE, F.R.S., Vice-President, in the Chair.

The Annual Report of the Council for the session 1839-40 and the auditor's report, with the Balance Sheet, were read, and adopted. (See p. 1, for the Report, and for the Balance Sheet, see p. 12.)

On the motion of Woronzow Greig, Esq., seconded by Henry Hallam, Esq., the following resolutions were carried with unanimous applause:—

That His Royal Highness Prince Albert of Saxe Coburg and Gotha be requested to honour the Statistical Society of London by accepting the appointment of Patron.

That the following address be agreed to:—

“The Statistical Society of London, deeply impressed with respect for your Royal Highness's character and station, and believing that the objects of their pursuit cannot be indifferent to one occupying the eminence on which you stand, humbly request that your Royal Highness will permit your name to be put at the head of their Society as its Patron.

“Placed by Providence so near the throne of these realms, your Royal Highness will doubtless conceive the condition of the various classes of the community, the subjects of that throne, to be a study most worthy of your attention; and though the labours of the Statistical Society, scarce yet in its sixth year, have not hitherto made very great progress, still this is its task, to acquire the knowledge of facts connected with the condition of the people of all nations, to arrange and utilise those facts, and, studiously abstaining from what are commonly called politics, to provide materials for the politician, the economist, and the statesman.”

That the Chairman be requested to sign the foregoing address on behalf of the Society, and to transmit the same through the proper channel to His Royal Highness Prince Albert of Saxe Coburg and Gotha.

Lieut.-Col. Pringle Taylor and Mr. Rawson were appointed scrutineers of the ballot for the Council, and Lieut.-Col. Taylor and Dr. Guy for the Officers, when those gentlemen having reported the result of the votes, it was announced from the chair that the following members were duly elected as council and officers:—

COUNCIL.

Charles Babbage, Esq., F.R.S.
 Sir John Boileau, Bart.
 Right Hon. W. Sturges Bourne, F.R.S.
 John Bowring, Esq., LL.D.
 John Clendinning, Esq., M.D.
 Rev. E. W. Edgell.
 William Farr, Esq.
 Right Hon. Earl Fitzwilliam, F.R.S.
 Joseph Fletcher, Esq.
 Francis H. Goldsmid, Esq.
 Woronzow Greig, Esq., F.R.S.
 Henry Hallam, Esq., F.R.S.
 James Heywood, Esq., F.R.S.
 James P. Kay, Esq., M.D.
 Sir Charles Lemon, Bart., F.R.S.
 George C. Lewis, Esq.

Nathaniel Lister, Esq., M.D.
 Right Hon. the Earl Lovelace.
 Right Hon. Holt Mackenzie.
 Herman Merivale, Esq.
 The Lord Bishop of Norwich.
 William Smith O'Brien, Esq., M.P.
 Sir Woodbine Parish, K.C.H., F.R.S.
 G. R. Porter, Esq., F.R.S.
 Rawson W. Rawson, Esq.
 Lord Viscount Sandon, M.P.
 R. A. Slaney, Esq., M.P.
 Lieut.-Col. Sykes, F.R.S.
 Thomas Tooke, Esq., F.R.S.
 Major M. A. Tulloch.
 George William Wood, Esq., M.P.

OFFICERS.

President—Lord Viscount Sandon, M.P.

Treasurer—Henry Hallam, Esq., F.R.S.

Honorary Secretaries—Dr. Clendinning, Joseph Fletcher, Esq.,
 Rawson W. Rawson, Esq.

The following motion was made by H. Love, Esq., and seconded by James Whishaw, Esq.:—

“That it is expedient to discontinue the *Journal*,” which, after a debate, being supported by only one other member, was put to the vote and negatived.

On the motion of Dr. Clendinning, seconded by James Whishaw, Esq., it was resolved—

That in the third clause of the 17th rule, the words “three weeks” be substituted for “fourteen days,” and at the conclusion of the same clause the following words be inserted:—“The Council shall give fourteen days’ notice to every Fellow, of all questions of which such notice shall have been given to them.”

The thanks of the Society were voted to the Chairman and the meeting adjourned.

Fifth Ordinary Meeting. Monday, 16th March, 1840.

Viscount SANDON, M.P., President, in the Chair.

The following gentlemen were proposed as candidates for admission into the Society:—William Ratray, Esq., King William Street; James Luke, Esq., Belfast; Walter Ruding Devereux, Esq., James Street, Buckingham Gate.

The first paper read, was a Report of a Committee of the Society appointed to inquire into the Moral and Physical Condition of the Working Classes in the Parishes of St. John and St. Margaret, Westminster. (See p. 14.)

A second paper was then read, “On the Effect of the New Postage Arrangements upon the Number of Letters.” By Rowland Hill, Esq. (See p. 102.)

Miscellaneous.

Opium Trade.—The quantity of opium sold by the Indian government at the Calcutta presidency was, in 1820-21, 4,244 chests; in 1830-31, 7,939 chests; and in 1837-38, 19,133 chests. At the Bombay presidency 1,600 chests were sold in 1821-22, and 12,037 chests were permitted to pass under licence in 1837-38. The net profit in the Bengal presidency in 1834-35 (the last year for which accounts have been received) was 1,361,917*l*. The sum received for passes in Bombay was, in 1837-38, 150,462*l*.

Trade of Canton.—The value of the trade carried on by British ships at Canton in the year 1833-34, the exchange being taken at 4*s*. 4*d*. a dollar, was, imports 5,019,280*l*., exports 4,474,576*l*. Of these sums the private traders imported 4,142,480*l*., and exported 2,676,722*l*. The American trade in the year 1832-33 was, imports 1,811,976*l*., exports 1,782,164*l*. The Dutch trade in 1831-32 was, imports, 99,043*l*., exports 137,289*l*. The trade of other countries can only be estimated by the number of ships. In 1833-34 there arrived in China 41 Spanish, 19 Portuguese, 4 Danish, 1 Prussian, 8 French, 4 Hamburgh, 1 Belgian, and 1 Mexican, vessels.

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ended 7th January, 4th February, and 3rd March, 1840, and in the corresponding Quarters of the preceding Year. (Continued from Vol. ii. page 463.)

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
1839.	£.	£.	£.	£.	£.	£.
8th Jan.	18,291,000	10,315,000	28,516,000	21,680,000	9,335,000	31,016,000
5th Feb.	18,252,000	10,269,000	28,521,000	22,157,000	8,919,000	31,076,000
5th March ...	18,298,000	9,950,000	28,248,000	22,767,000	8,106,000	30,873,000
1840.						
7th Jan.	16,366,000	7,136,000	23,502,000	22,913,000	3,451,000	26,367,000
4th Feb.	16,511,000	7,570,000	24,081,000	22,981,000	3,964,000	26,945,000
3rd March ...	16,678,000	7,896,000	24,574,000	23,223,000	4,271,000	27,494,000

Aggregate Amount of Notes circulated in England and Wales by Private Banks, and by Joint Stock Banks and their Branches, respectively, in each of the Quarters ended 28th September, and 28th December 1838-39, (Continued from Vol. ii. p. 463.)

Quarters ended.	1838.			1839.		
	Private Banks.	Joint Stock Banks.	Total.	Private Banks.	Joint Stock Banks.	Total.
28th Sept. ...	£. 7,083,811	£. 4,281,151	£. 11,364,962	£. 6,917,657	£. 4,167,313	£. 11,084,970
28th Dec.	7,599,912	4,625,516	11,225,488	7,251,678	4,170,767	11,422,445

An Account of the Quantities of Foreign and Colonial Wheat and Wheat-Flour imported, paid Duty, and remaining in Warehouse, in each of the Months ended 5th January, February, and March, 1840, and in the Year 1839. (Continued from Vol. ii. p. 464.)

Months ended	WHEAT.			WHEAT-FLOUR.		
	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.
	Qrs.	Qrs.	Qrs.	Cwts.	Cwts.	Cwts.
5th Jan.	72,820	12,401	128,397	122,159	28,070	123,981
5th Feb.	45,557	4,995	178,422	45,680	6,920	167,273
5th Mar.	44,812	7,660	215,742	82,417	6,052	226,667
Year 1839	2,634,356	2,521,111		840,543	665,692	

Average Prices of Corn per Imperial Quarter, in England and Wales with the Rate of Duty on Foreign Wheat, during each Week, from 27th December, 1839, to 20th March, 1840: also the Average of each Month, of the Quarter ended Christmas, and of the Year 1839, with the Average Septennial Prices per Imperial Bushel, calculated according to the Tithe Commutation Act, in 1839.—(Continued from Vol. ii. p. 464.)

DATE.	WHEAT.			WEEKLY AVERAGE.				
	Weekly Average.	Aggregate Average.	Duty on Foreign.	Barley.	Oats.	Rye.	Beans.	Peas.
Weeks ended	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1839								
Dec. 27 .	66 5	66 10	20 8	40 5	23 11	38 6	42 6	42 7
1840								
Jan. 3 .	66 1	66 4	20 8	39 3	24 2	39 7	42 0	42 6
„ 10 .	65 10	66 2	20 8	39 6	24 1	36 9	41 2	40 11
„ 17 .	66 0	66 1	20 8	39 8	23 10	39 6	40 8	39 9
„ 24 .	65 4	66 1	20 8	39 7	23 6	37 10	40 8	40 10
„ 31 .	65 2	65 10	21 8	39 0	23 10	38 1	39 9	39 8
Feb. 7 .	64 11	65 7	21 8	38 3	24 0	37 8	39 7	39 6
„ 14 .	65 3	65 5	21 8	38 3	24 2	36 5	39 7	40 4
„ 21 .	65 11	65 5	21 8	38 4	24 3	36 0	39 11	39 10
„ 28 .	66 4	65 6	21 8	38 4	24 6	38 6	40 0	39 10
Mar. 6 .	66 11	65 9	21 8	38 11	25 2	37 3	40 1	39 7
„ 13 .	68 2	66 3	20 8	38 11	25 8	36 6	41 0	40 5
„ 20 .	69 3	67 0	18 8	39 7	26 1	38 8	41 1	41 2
<i>Months.</i>								
1839 Dec.	66 3	67 2	..	40 3	24 7	38 5	43 10	43 0
1840 Jan.	65 8	66 1	..	39 4	23 10	38 4	40 10	40 8
„ Feb.	65 7	65 5	..	38 3	24 2	37 1	39 9	39 10
Quarter ended } Christmas }	66 10	..	..	41 2	25 5	38 1	45 0	44 4
Year 1839*	70 8	..	..	39 6	25 11	42 0	41 3	41 2
Septennial † } Average, 1839 }	6 9	..	..	3 11 $\frac{1}{4}$	2 9 $\frac{1}{4}$	..	..	..

* For averages of 1837-8, see vol. ii. p. 63.

† For averages of 1835-38, see vol. ii. p. 464.

An Abstract of the Net Produce of the Revenue of Great Britain in each of the Years and Quarters ended 5th January, 1839 and 1840.

Description.	Years ended 5th January,			
	1839.	1840.	Increase.	Decrease.
	£.	£.	£.	£.
Customs	19,154,729	19,840,213	685,484	..
Excise	11,864,114	11,952,252	88,138	..
Stamps	6,612,927	6,574,461	..	38,466
Taxes	3,654,818	3,711,794	56,976	..
Post-Office	1,525,000	1,519,660	..	6,000
Crown Lands	170,000	160,000	..	10,000
Miscellaneous	80,704	86,610	5,906	..
Imprest and other Monies	509,260	416,896	..	92,364
Repayments of Advances.	604,462	739,183	134,721	..
Total Income . . .	44,176,014	45,000,409	971,225	146,830

Description.	Quarters ended 5th January,			
	1839.	1840.	Increase.	Decrease.
	£.	£.	£.	£.
Customs	4,854,388	4,779,305	..	75,083
Excise	3,627,190	3,427,271	..	199,919
Stamps	1,521,123	1,587,061	65,938	..
Taxes	1,586,689	1,584,699	..	1,990
Post-Office	365,000	351,000	..	14,000
Crown Lands	40,000	40,000	..	..
Miscellaneous	36,097	18,800	..	17,297
Imprest and other Monies	125,060	41,992	..	83,068
Repayments of Advances.	193,716	176,890	..	16,826
Total Income . . .	12,349,263	12,007,018	65,938	408,183

Total Increase on the Year, £824,395; total Decrease on the Quarter, £342,245.

An Abstract of the Income and Charges of the Consolidated Fund in each of the Quarters ended 5th January, 1839 and 1840.

INCOME.			CHARGE.		
Description.	Quarters ended 5th January,		Description.	Quarters ended 5th January,	
	1839.	1840.		1839.	1840.
	£.	£.		£.	£.
Customs	3,750,032	3,805,719	Permanent Debt . . .	8,107,779	8,172,56
Excise	3,649,496	3,448,707	Terminable Annuities .	735,907	777,727
Stamps	1,521,123	1,587,062	Interest on Exchequer	..	..
Taxes	1,586,689	1,584,699	Bills	8,665	10,920
Post Office	365,000	351,000	Sinking Fund . . . . .	..	..
Crown Lands	40,000	40,000	Civil List	96,410	96,858
Miscellaneous	36,097	18,800	Other Charges	464,197	485,015
Imprest and other Monies	125,060	41,992	Charge for Advances.	50,000	98,692
Repayments of Advances	193,716	176,890			
Total	11,267,213	11,051,869	Total Charge	9,466,958	9,601,775
Cash applied to pay off } Deficiency Bills. . . }	..	50,000	The Surplus	1,800,256	1,593,094
Total Income . . .	11,267,213	11,104,869	Total	11,267,213	11,104,869

An Analysis of Bankruptcies in England and Wales, showing the Counties and Trades in which the same occurred, during each Month, from December, 1839, to February, 1840, and during the year 1839. (In continuation of account at Vol. ii., p. 466.)

COUNTIES.	Dec.	Total of 1839.*	Jan.	Feb.	TRADES.	Dec.	Total of 1839.*	Jan.	Feb.
Bedford . . .	..	2	..	1	<i>Persons connected with Manufactures.</i>				
Berks . . .	1	11	1	..					
Bucks . . .	1	4	..	1					
Cambridge . .	..	3	..	1					
Chester . . .	9	28	2	1	Cotton Trade .	9	51	6	9
Cornwall . . .	..	5	1	1	Woollen do. .	3	26	4	8
Cumberland . .	..	4	..	..	Silk do. .	1	8	1	..
Derby . . .	1	9	..	1	Linen do. .	1	4	2	..
Devon . . .	5	29	3	3	Iron Foundry .	1	4	4	..
Dorset . . .	..	8	..	1	Iron Wares .	1	19	1	4
Durham . . .	3	14	..	2	Building Trades	6	47	2	4
Essex . . .	..	6	..	..	Miscellaneous .	10	64	9	13
Gloucester . .	3	29	3	7	<i>Agriculture.</i>				
Hants . . .	1	18	1	2					
Hereford . . .	..	8	1	1					
Hertford . . .	..	5	..	..	Farmers. . .	..	5	..	..
Huntingdon . .	..	1	..	..	Corn, Hay, and				
Kent . . .	2	23	2	1	Hop Dealers,				
Lancaster . . .	24	246	24	26	Millers . .	2	41	3	7
Leicester . . .	2	6	1	3	Cattle and Wool				
Lincoln . . .	1	18	1	..	Dealers . .	4	23	1	7
Middlesex . . .	24	259	21	26	Coaches and				
Monmouth . . .	..	5	1	2	Horses . .	..	11	1	1
Norfolk . . .	2	15	1	4	Brewers, Malt-				
Northampton .	..	4	1	3	sters, and Dis-				
Northumberland	3	12	3	4	tillers. . .	1	25	3	..
Nottingham . .	2	8	3	1	<i>Other.</i>				
Oxford . . .	2	5	3	1					
Rutland . . .	..	..	..	..	
Salop . . .	1	7	..	1	Innkeepers and				
Somerset . . .	1	19	2	2	Victuallers. .	15	114	13	11
Stafford . . .	4	26	3	3	Merchants, Bank-				
Suffolk . . .	1	7	..	3	ers, Warehouse-				
Surrey . . .	5	46	6	8	men, Agents,				
Sussex . . .	2	20	2	..	Brokers, Ship-				
Warwick . . .	8	57	8	9	owners, and				
Westmoreland .	..	1	..	..	Wholesale Deal-				
Wilts . . .	1	5	..	..	ers	19	177	19	23
Worcester . . .	..	4	..	1	Tradesmen, Shop-				
York . . .	14	89	15	18	keepers, and				
Wales . . .	5	17	7	3	Retail Dealers.	44	421	39	16
					Miscellaneous .	8	43	8	8
Total in 1839-40	128	1083	116	141	Total in 1839-40	128	1083	116	141
Total in 1838-39	55	843	66	63					

* A corresponding statement for the year 1838 will be found in Vol. ii., p. 127.

QUARTERLY JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

JULY, 1840.

Report of a Committee of the Statistical Society of London, appointed to collect and enquire into Vital Statistics, upon the Sickness and Mortality among the European and Native Troops serving in the Madras Presidency, from the year 1793 to 1838.

THE official Reports which have been recently laid before Parliament, exhibiting the result of extensive enquiries into the Sickness and Mortality among the British Troops serving in different parts of the world, have attracted an attention corresponding to the interest of the subject, and to the ability with which they are drawn up. These enquiries, however, have not yet been extended to the East Indies, and it is probable that the investigation in that part of the globe will be confined to the European troops in Her Majesty's service. Your Committee have had the good fortune to obtain a series of returns, relating both to the European and native troops serving in the Madras Presidency, for a long series of years, similar to those upon which the official reports are founded. For these they are indebted to the kindness of James Annesley, Esq., late President of the Madras Medical Board, who, in 1825, published some valuable reports upon the health and mortality of the troops in that Presidency, and who has, upon the present occasion, contributed important assistance by superintending the preparation of the abstracts contained in this report, and by furnishing the materials for the historical and local observations which accompany it.*

* The following extract from a note, addressed by Mr. Annesley to the Secretary of the Statistical Society of London, will explain the circumstances under which the returns have been prepared, and have come into the possession of the Society.

"Many years' extensive experience in India brought to my observation the great prevalence of certain diseases in particular districts, and led me to the collection of materials for the formation of the returns upon which the following statements have been formed. In 1822, by the kindness of the late Lieutenant-General Sir Alexander Campbell, K.C.B., then Commander-in-Chief of the Madras army, I was favoured with a copy of a set of tables of medical returns, which had been compiled by the Madras Medical Board, from the public records contained in their office. These embraced a period of seven years, from 1815 to 1821, and from them I framed the tables which I published in October 1825, under the head of 'Sketches of the most prevalent Diseases in the different Stations and Divisions of the Madras Army,' a copy of which I have had the pleasure of depositing in the Library of the Statistical Society.

"The interest which I have always taken in this subject, from a conviction of its great importance to medical science, as well as a deep regret that it should have been so much neglected, induced me to pursue the enquiry, and, having been appointed to the Medical Board, shortly after my return to India in 1829, I was enabled to examine the records, and to collect from them information which

Your Committee are thus in some measure enabled to anticipate the official reports which they understand are in course of preparation ; and, as their data extend over a much wider period than any embraced in the reports which have hitherto appeared, they have reason to believe that a considerable part of the information now laid before the Society will not be superseded by any future official returns.

Your Committee consider it desirable to state that they have had the advantage of the co-operation of Major Tulloch, the author of the official reports, in their labours, by which means they have been able to draw up their tables in the same form adopted in those reports, and to guard against the risk of making comparisons based upon dissimilar data.

The returns upon which this report has been founded include the whole of the European troops serving under the Madras Presidency during a period of 46 years, from 1793 to 1838, and the whole of the native troops during 17 years, from 1822 to 1838. The total force in the latter year, exclusive of the troops serving on the Tenasserim coast, at Moulmein, Singapore, Malacca, and Penang, amounted to 10,000 Europeans, and 58,320 natives ; but it had been considerably greater at various times during the period under review.

These returns exhibit the mean strength of both classes of troops, with the number of admissions into hospital, and of deaths in each year, as well as the principal diseases by which the troops have been affected. They relate to the non-commissioned officers and privates only ; the officers are not included.

As the European troops consist of Her Majesty's regiments, or of troops recruited in England for the service of the East India Company, it is unnecessary to give any description of their character, which resembles that of other portions of the same force serving elsewhere. It may, however, occur, that habits of intemperance, which are prevalent among this class of the soldiery, united to exposure to a tropical climate, may occasion a predisposition to disease greater than that which exists among troops in other circumstances. The Sepoys are in general healthy active young men, very little addicted to intemperance, and capable of undergoing great fatigue as long as they retain their health. But privation of the necessary comforts of life, of proper clothing, food, and accommodation, quickly leads to exhaustion and consequent sickness.

As the medical returns were not perfect during the early years of this period, the number of sick and of deaths from 1793 to 1814 have been taken from regimental returns in the office of the Adjutant-General of the Army. These are perfectly correct as far as regards the mortality, but the records only shew the number of sick remaining in

could only be procured in the office of that Board ; and I continued these enquiries during the remainder of my residence in India, from 1829 to 1838.

" On my return to England, in May 1838, I contemplated the publication of these reports in a second edition of my '*Researches into the Cause, Nature, and Treatment of the most prevalent Diseases of India,*' now preparing for the press in a more portable shape, and directed entirely to practical objects ; but having had an opportunity of shewing them to Mr. Porter and Mr. Rawson, I have been induced, at the suggestion of those gentlemen, as the best way of making them useful, to offer them to the Statistical Society as documents that may be depended on as official and authentic."

hospital on the last day of each month. This number, however, may be supposed in general to approach the average of the month, and to indicate the number of mean sick in each month. In the same manner the average of the aggregate of the twelve months will indicate the number of mean sick, or the average of men in hospital at any one time during the year. The returns from 1815 to 1821, in which the number of the sick is omitted, are taken from tables prepared by the Madras Medical Board, and published in the first of Mr. Annesley's works, referred to in the preceding note. Those from 1822 to 1826 have been taken from abstract tables in the office of the same Board, and the information which they contain is generally correct; but the tables from 1827 to 1838 have been prepared with every possible care and attention.

The returns of native troops, which include the whole force serving under the same Presidency from 1822 to 1838, are derived from the same sources as those relating to the European troops.

As the localities and climate of Moulmein, Penang, Malacca, and Singapore, which, although under the Madras government, are entirely separated from the rest of the Presidency, differ very materially from those of Madras, it has been thought proper to separate the returns from those places, extending over a period of 10 years, 1829 to 1838, from those of the Madras Presidency, and to make them the subject of a separate enquiry.

In the present Report your Committee will confine themselves to the general results for the main portion of the Presidency; exhibiting, first, the number and proportion of admissions and deaths among the European and native troops in the Peninsula of India; and, secondly, the diseases by which the sickness and mortality among each class of troops have been occasioned. On a future occasion they propose to examine the several stations separately, and to endeavour to ascertain what effect differences of locality and climate have had upon the troops.

The extent of territory possessed by the East India Company in Madras, previously to 1793, was about 64,650 square miles, of which 24,000 had been acquired in 1792, by the conquest of Malabar, and of other districts taken from Tippoo, Sultan of Mysore. The territory since acquired in the same Presidency is about 185,000 square miles in extent, exclusive of 78,000 square miles in Assam, Arracan, and the Tenasserim coast, &c., which are separated from the rest of the Presidency.*

It is obvious that no minute account of the climate and local peculiarities of so vast an extent of country can be given until the several stations are separately examined; and the unsettled state of the troops during a large portion of the period under review would render such an account of little use except for a few years at the close of the term. Some cursory observations, however, may be useful, for the purpose of giving a general view of the Presidency, compared with other countries and with the remaining part of India.

The winds and rain in the Indian Peninsula are periodical, and are called the north-east and south-west monsoon. The Carnatic, on the eastern coast, is chiefly exposed to the influence of the north-east monsoon; while the south-west monsoon extends over the whole Peninsula, with the exception of the Coromandel coast, though there are certain

* These figures have been taken from Sir J. Malcolm's *Life of Clive*.

districts and stations on that coast and in the Carnatic which partake, in some degree, of the south-west monsoon.

The north-east monsoon, commencing about the middle of October,* brings in the periodical rains, which continue to the end of November or the middle of December; and, after the rains cease, the north-east wind continues until the end of February. This is the cold season, and the climate during this period, in the Carnatic, is cool and pleasant. During March and April the southerly, or, as it is called, the 'long-shore winds prevail, which are hot and relaxing, loaded with clouds of sand and dust, and causing biliary derangement and slight febrile attacks. This may be considered the most disagreeable part of the year; but these winds are attended with many advantages, by drying up and dissipating noxious vapours which may have originated during the rainy and cold season. In May the southerly and westerly winds, usually called the land-winds, commence. They are very hot, and continue during the months of May, June, and July, which constitute the hot season. August and September are generally close and sultry.

The south-west monsoon commences in May, and brings the periodical rains over the greatest part of the Peninsula, with the exception of the Carnatic below the Ghauts. Here these winds are exceedingly hot, and occasion, as already stated, the hot season, which is generally the most healthy. Refreshing showers occasionally fall in the months of July and August; but about the end of August and the beginning of September, when the south-west monsoon ceases, the climate becomes close and sultry, and the winds variable all over the country, until October, when the north-east monsoon again commences.

The annual fall of rain in this Presidency varies from 30 to 80 inches, but the usual quantity is from 50 to 60 inches.

The general character of the climate of the Carnatic is dry and hot: the range of the thermometer is usually from 70° or 75° to 84° or 88°; but it is sometimes considerably higher. In May and June it rises as high as 98° to 105°. The variation of the barometer during the year is inconsiderable; never under 29 inches (except in stormy weather, when it sometimes falls a degree lower), and seldom above 30 inches.

The Madras Presidency forms seven military divisions, with three stations beyond the frontier, and one beyond seas. The northern division extends along the sea-coast from Ganjam, near Berhampore, at the north-eastern extremity of the Presidency, and in the 19th degree of north latitude, southward to the river Khistnah. It is bounded on the west by the range of mountains running parallel to the coast. The centre division lies between the river Khistnah and the river Penaur at Cuddalore, below Pondichery, between the 11th and 12th degrees of north latitude. The southern division extends from that line to Cape Comorin. Both these divisions have the sea for their eastern boundary, and the Western range of mountains for the other. The Travancore division extends along the western coast, from Cape Comorin northwards, to the river Ponany, just below the 11th degree of north latitude, where the Malabar and Canara division

* For many years past the monsoons have been particularly irregular and uncertain.

commences, and runs north between the Ghauts and the sea as far as Goa, in the 15th degree of north latitude. The divisions of Mysore and the Ceded Districts consist of the high table land between the centre division of the eastern coast and the Malabar and Canara division on the western shore. The Ceded Districts extend as far north as the 16th degree of north latitude; Hyderabad is one degree farther to the north, above the Ceded Districts; and Nagpore four degrees north of Hyderabad, in the same longitude. The Southern Mahratta country is upon the high table land north-west of the Ceded Districts. With reference to the climate of these several districts, the centre, presidency, and southern divisions are all influenced by the rains of the north-eastern monsoon, although the more southerly stations and those near the mountains partake, in some degree, of the south-west monsoon. The heat is considerably greater and more oppressive in the centre than in the other two divisions. The northern division, which extends from the Khistnah river northwards to Ganjam, experiences the rains of the north-east monsoon, as well as a portion of the south-western. The temperature is somewhat lower than in the Carnatic, and the climate, during part of the year, is very pleasant. Most of the stations, however, in this division are situated in the vicinity of mountains and thick jungle, and sometimes near marshy ground, where fever occasionally prevails to a great extent, and where it is extremely formidable. Mysore and the Ceded Districts partake of both monsoons. In both of these divisions the temperature is very variable. In the former, heavy dews and a damp atmosphere prevail more or less throughout the year, but more particularly during the first four months; and the difference of temperature between the day and night is excessively great. Some of the stations in this division, for instance, Seringapatam, Serah, and Chittledroog, proved so fatal to Europeans that they have for some years past been abandoned as military posts. In the Ceded Districts the thermometer ranges during January and February from 60° to 98° ; in March, from 68° to 106° ; in April, from 78° to 110° ; with cloudy and oppressive weather until November, when it falls again, and ranges from 66° to 80° . Malabar and Canara have the south-west monsoon, as well as the Hyderabad and Nagpore States. The Hyderabad division is subject to great variations of temperature, and the mortality among Europeans stationed in it is high.

The soil of the Carnatic near the sea is composed of sand and loam, sparingly intermixed with the remains of marine and testaceous animals. The inland parts of the province contain hills of sienite, mixed with a proportion of felspar, the whole soil appearing to consist of the debris of decomposed sienitic mountains. According to local circumstances it is either a loam mixed with sand and gravel, and strongly impregnated with iron, or, in low and wet places, a stiff red loam mixed with vegetable earth and fine sand. On eminences it is generally sand and gravel. It is also in some places impregnated with salt, and in dry weather presents a saline efflorescence on the surface. The country is usually divided into high and low grounds; on the former various kinds of grain are cultivated, and on the latter rice. In all parts of the country distant from rivers, tanks of large dimensions are very common, which are kept in order by Government for the purpose of irrigation.

Your Committee will now proceed to examine the several returns consecutively. The first relates to the European troops in the Madras Presidency.

1. *European Troops.*

With the view of comparing different periods of service, the returns of European troops, which extend over a considerable range of years, amounting to nearly half a century, are divided into several terms, corresponding with the most important changes in the operations of the army, and of nearly equal duration, viz.—

From 1793 to 1800	||	From 1822 to 1830
" 1801 „ 1809		" 1831 „ 1838
" 1810 „ 1821		

Previously to the conquest of Mysore, in 1799, the Madras territory was confined to a line of coast, extending in length from Ganjam to Cape Comorin, and, in breadth, from the Western range of mountains to the sea. That part between the Khistnah river and Ganjam is called the Northern Circars. From the Khistnah river southwards to Cape Comorin is called the Carnatic below the Ghauts, which now forms the centre and southern divisions of the army.—As it appears that none of Her Majesty's regiments, from whose returns the present statement, up to 1814, has been formed, served in the Northern Circars from 1793 to 1798, it follows, that the services of the European troops during this period were exclusively confined to the Carnatic. During the greater part of 1799, and the whole of 1800, they were actively employed in the field in making the conquest of Mysore, and settling the conquered provinces; but as the service of these two years was so intimately connected with that of preceding years, it could not well be separated. After the conquest of Mysore, their services were extended over a wider field of operations; the Malabar coast and Wynaud were taken possession of in 1799; and in 1800 the districts ceded to the Nizam in 1792, by Tippoo Sultan, were transferred to the East India Company, and now form one of the divisions of the army, under the name of the Ceded Districts. This finishes the first period from 1793 to 1800.

From the year 1801 to 1809 the army was considerably increased; and during the first five years of that period a general war, extending over the Carnatic, the newly-conquered countries, and the Deccan, from the Narbuddah river southwards to Cape Comorin, was carried on with the following powers, viz., the Southern and Western Poligars in the Carnatic below the Ghauts, the Niar and Moplah chiefs in Malabar, Wynaud, and Soonda in the Southern Mahratta country, the refractory chiefs in the newly-ceded districts, and with the Mahratta states in the Deccan, under the command of the Duke of Wellington, then Colonel Wellesley. The battles of Assay and Argaum were fought in September and October 1803, but the campaign did not finish till the winter of 1804-5; and during the whole of this period the troops suffered great privations and hardships from exposure to heavy rains, great vicissitudes of weather during the monsoons, hard and fatiguing marches, &c. In 1805, at the conclusion of the war, the territories under the Madras Presidency extended from the 8th to the 21st degree of north latitude,

and from the 75th to the 85th degree of east longitude, arranged under the following heads or divisions, viz.—

Original Territory in 1793-9.—The centre and southern divisions (with the newly-conquered country of Coimbatore), and the Northern Circars.

Newly-conquered Country, 1800-5.—The Mysore division, Ceded Districts, Malabar Coast, Wynaud, and Canara.

Subsidiary Force.—Hyderabad in the Deccan.

All the country north of the Narbuddah river is called *Hindoostan Proper*; that part between the Narbuddah river and the Khistnah river south is called the *Deccan*; and the territory from the Khistnah river southwards to Cape Comorin includes the newly-conquered country of Mysore, the Ceded Districts, Canara, Wynaud, and the Carnatic below the Ghauts, which, with the Northern Circars, constituted the limits of the Madras Presidency in 1805. The years from 1805 to 1809 were free from war, and complete the second period.

In 1810 and 1811 part of the army was again employed on service in the conquest of the Isles of France and Bourbon and the Island of Java. In the expedition of Java the troops were about four months at sea before they landed on the island. The years from 1812 to 1814 were a period of peace. In 1815 a large field force was formed on the Tamboodra river, in the Ceded Districts; and from that time the troops were constantly on the move until 1817, when they were again called into action against the Mahratta states, namely, Poonah, Nagpore, and Kandiesh, in the Deccan; and Malwah, north of the Narbuddah river, in Hindoostan. They continued in the field from 1817 to 1820, which concludes the third period from 1810 to 1820.*

The result of this war gave the following accession of territory, viz., Malwah in Central India, Poonah, Nagpore, Kandiesh, the Conkan, and the districts on the Narbuddah, the whole of which, with the exception of Nagpore, is under the Bengal and Bombay Presidencies.

The years 1821-2 were years of peace. From 1824 to 1826 the troops were employed in the Burmese war, and suffered severely from privation and fatigue with consequent sickness. From that time the Tenasserim coast has been occupied by Madras troops; and Penang, Malacca, and Singapore, which were formerly garrisoned by troops from Bengal, have become stations for Madras troops.

In addition, therefore, to the stations already mentioned, as belonging to the Madras Presidency in 1805, must be added the following, namely, Nagpore subsidiary force, Southern Mahratta country, Moulmein, Penang, Malacca, and Singapore. The three latter places are stations for native troops, there being only a small detachment of European artillery at Penang. From 1826 to 1830 were years of peace, with which the fourth period, from 1821 to 1830, closes.

From 1831 to 1833 were years of peace. In 1834 a field force was formed in Mysore, against the Coorg Rajah, and his country was added to the Madras territories; but this campaign was of short duration, and unattended by any disastrous results, either of wounds or sickness.

* The year 1821, being the last of the series in which the returns were defective has been since placed in this period.

From 1835 to 1837 a large native force was employed in the Northern Circars, in the Kimmidy, Palnaud, and Gumsoor Zemindaries; during which time there was a great deal of sickness and mortality among the native troops, which will form the subject of another report. This concludes the fifth period from 1831 to 1838.

Statement of the Mean Strength of the European Troops serving in the Madras Presidency in each Year from 1793 to 1838, with the Number of Mean Sick and Deaths in the same Force, and the Ratio to the Strength in each Year from 1793 to 1821, and the Number of Admissions into Hospital, and of Deaths, with the Ratio thereof to the Mean Strength in each Year from 1822 to 1838.

Years.	Mean Strength.	Mean Sick.	Deaths.	Ratio per 1000 of Mean Strength.	
				Constantly Sick.	Died.
1793	4,929	560	302	113	61
1794	4,686	377	220	80	46
1795	4,567	391	188	85	41
1796	5,025	446	236	88	47
1797	6,583	516	328	78	50
1798	5,385	499	275	92	51
1799	7,043	1,015	1,010	144	143
1800	6,891	723	538	104	78
	45,109	4,527	3,097	100	68
1801	8,110	854	779	105	96
1802	7,281	642	368	88	50
1803	10,624	1,092	1,265	102	119
1804	8,084	957	782	118	96
1805	7,679	946	497	123	64
1806	7,637	780	613	102	80
1807	9,318	943	725	101	77
1808	9,538	1,143	670	119	70
1809	10,779	1,163	637	108	59
	79,050	8,520	6,336	107	80
1810	12,398	1,038	703	83	56
1811	14,259	1,579	1,141	110	80
1812	11,509	1,419	890	123	77
1813	11,202	1,146	709	102	63
1814	10,716	1,141	559	106	52
1815	13,711	<div style="display: flex; align-items: center; justify-content: center;"> <div style="font-size: 4em; margin-right: 10px;">{</div> <div style="text-align: center;"> not stated in returns. </div> </div>	690	..	51
1816	13,530		612	..	45
1817	13,618		753	..	56
1818	13,463		1,306	..	97
1819	13,675		934	..	68
1820	11,050		628	..	56
1821	10,742		614	..	57
	149,873	..	9,539	..	63

Statement of the Mean Strength of the European Troops serving in the Madras Presidency, &c.—(continued).

Years.	Strength.	Admissions.	Deaths.	Ratio per 1000 of Mean Strength.	
				Admitted.	Died.
1822	10,813	31,073	683	2,873	63
1823	11,061	29,748	543	2,689	49
1824	10,802	38,625	1,450	3,575	134
1825	9,616	34,268	1,150	3,563	120
1826	10,015	40,224	1,046	4,016	104
1827	11,712	24,070	836	2,055	71
1828	12,171	22,504	651	1,849	53
1829	11,748	19,964	413	1,699	35
1830	11,650	18,175	374	1,560	32
	99,588	258,651	7,146	2,597	71
1831	10,775	18,287	489	1,697	45
1832	10,627	17,605	591	1,656	55
1833	9,575	20,472	687	2,138	71
1834	9,821	22,840	599	2,325	61
1835	9,531	18,537	312	1,947	32
1836	10,250	17,662	349	1,723	34
1837	10,068	17,735	551	1,761	54
1838	9,997	17,535	369	1,754	37
	80,644	150,673	3,947	1,868	49
Total period from 1793 to 1838 .			30,065		
Average .	9,875	..	654	..	66

The principal results to be drawn from this Table are that the mean strength of Europeans from 1793 to 1800 averaged 5,600 men, having increased from 4,900 to 6,800. In 1801 the force was increased to 8,100, and the average of the next period, from 1801 to 1809, was 8,700. In 1810 the force amounted to 12,400, and in the 12 years ending with 1821 it averaged nearly 12,500. During the next period of 9 years, from 1822 to 1830, it averaged only 11,000, and, during the subsequent 8 years, terminating with 1838, it had further decreased to 10,000. The average of the whole period was 9,800 men.

The total number of deaths, during the whole period, was 30,065, and the annual average, 654. The greatest number of deaths in any one year was 1,450, in 1824, during the Burmese war, when the mean strength was 10,800; but the greatest mortality in proportion to the strength was in 1799, during the conquest of Mysore, and the siege of Seringapatam, when 1,010 men, out of 7,043, or 143 per 1,000, died. In 1824 the proportion was only 134 per 1000.

The average proportion of men constantly in hospital during 21 years, from 1793 to 1814, when a blank occurs in the returns,* was

* The returns for this period, published by Mr. Annesley in 1825, were copied from regimental returns which were made out yearly, but did not include the number of admissions into hospital. The returns of the Medical Board, which

105 per 1000, or $10\frac{1}{2}$ in 100. The number of deaths during the same period was 73 per 1000. The extreme cases occurred in 1799, during the conquest of Mysore, when the proportion of mean sick rose to 144 per 1000, and the deaths to 143 per 1000; and, on the other hand, in 1797, when the admissions were as low as 78 per 1000, and in 1795, when the deaths were only 41 per 1000. From the year 1822 the account exhibits the number of admissions into hospital during the year, instead of the number remaining in hospital at the end of the month; and the results are that, during 17 years, the average annual proportion of admissions to the mean strength was 2,271 per 1000; so that each man, on an average, was admitted $2\frac{1}{4}$ times into the hospital during a year; and the proportion of deaths to the mean strength was 61 per 1000. The extreme cases during this latter period were 4,016 admissions per 1000, in 1826, and only 1,560 in 1830; and, with regard to mortality, 134 deaths per 1000 in 1824, and only 32 per 1000 in 1830. If the five years from 1822 to 1826, which embrace the Burmese war, be excluded, the proportion of admissions to the mean strength will be reduced to 1,838, and that of deaths to 48, per 1000. The following comparison, with similar returns for troops in the United Kingdom, taken from the official reports, will shew the extent of the difference between the two countries:—

	European Troops in Madras Presidency. 12 Years.	Dragoons and Dragon Guards in United Kingdom. 7½ Years.
Proportion of Admissions to the Mean Strength	1,838 per 1000	929 per 1000
Deaths to Ditto	48 „	14 „
Deaths to Admissions	1 in 38	1 in 66

The admissions are twice as numerous, and the deaths are $3\frac{1}{2}$ times as numerous, in the Madras Presidency. The proportion of deaths to admissions is not in the same ratio, which is a fact worthy of attention; but it is greatly in excess. It is, however, satisfactory to be able to state that there has been a considerable improvement during the last 10 years in the Presidency, and that, upon the average of the last 3 years, the admissions have not exceeded 1,746 per 1000, and the mortality has been only 41 per 1000.

This diminution of sickness and mortality in the European army, during the last few years, is a point deserving of particular attention, as various causes may be assigned for the improvement. Among these may be enumerated, a better knowledge of the nature and treatment of intertropical diseases; the greater attention which has, of late years, been paid to the regulation, care, and comforts of the sick in hospital; and the great improvement made in the comfort of the soldiers on their first arrival in India. These are points upon which your Committee may enter more fully upon another occasion. At present they will confine themselves to the remark, that there is reason to believe that the health of troops in India depends in a considerable degree upon the interior economy of regiments, as regards their clothing, sleeping, diet, and exercise.

With regard to the proportion of deaths between seasons of peace and war in India, there are grounds for believing that deaths from shewed the diseases, did not exhibit the years separately, but included the whole period of seven years in one statement. No other information, however, could be obtained at that time.

wounds are by no means so numerous as might be expected, and that the greater proportion of deaths during warfare chiefly arises from disease caused by vicissitudes of climate and other evils, to which the troops are necessarily exposed upon active service.

During a period of 46 years it appears, from the above statements, that the general loss by death in the European army under the Madras Presidency, in war and in peace, amounted to 30,065 men, out of an annual average strength of 9,800 men, never under 7,000 after the year 1800, and only once exceeding 14,000.

During the above period there was war for 21, and peace for 25 years. In 21 years of war 15,271 men died, out of an average force of 8,800; and in 25 years of peace 14,794 died, out of an average force of 11,500. The average annual number of deaths in the first period was 727, which, compared with the mean force, yields a result of 82 deaths per 1000: in the latter period the deaths average 592 annually, and the proportion to the mean force was 55 per 1000. The excess, therefore, during the period of war was exactly three-fifths.

When the service upon which the troops were employed was confined to the Carnatic, from 1793 to 1798, a period of 6 years, the deaths amounted to 1,549, out of an average effective strength of 5,196 men, or an average of 258 deaths per annum, and a proportion of 49 per 1000 of the mean strength.

In the succeeding two years, 1799 and 1800, during the siege of Seringapatam and the conquest of Mysore, when the troops were spread over a more extended field of operations, and experienced greater vicissitudes of climate, the deaths amounted to 1,548, out of an average force of 6,967, the number being equal to the whole sum of the preceding 6 years in the Carnatic. The annual average mortality in these two years was 774, or 111 per 1000 of the mean force.

From 1801 to 1805, a period of 5 years, during which time the troops were engaged in active warfare in the Carnatic, the Malabar Coast, Wynaud, Soonda, Mysore, the Ceded Districts, and the Deccan, the deaths were 3,691, out of an average force of 8,355 men. The annual average mortality was 738, and the ratio per 1000 of the mean strength was 88.

From 1806 to 1809, a period of 4 years of peace, the deaths were 2,645, out of an average force of 9,318 men: the average was 661 deaths per annum, and the ratio to the mean force 70 per 1000.

The troops were employed during 1810 and 1811 in the conquest of the French and Dutch islands; and the deaths on this service were 1,844, out of an average force of 13,328 men. The average annual mortality was 922, and the ratio per 1000 of the mean force was 69.

Between 1812 and 1816 there was no actual war, but the troops, particularly those serving in the Deccan, were very much harassed by fatiguing marches in pursuit of Pindaries; and the deaths, during this period of 5 years, amounted to 3,460, out of an average force of 12,133 men, or an annual average of 692 deaths, and a ratio to the mean strength of 57 per 1000.

The Mahratta, or what was called the Pindarie, war, succeeded this period, and continued from 1817 to 1819. The deaths during these 3 years amounted to 2,993, out of an average force of 13,585 men, or an average of 997 deaths per annum, and a ratio of 73 per 1000 of the mean strength.

From 1820 to 1823 inclusive, 4 years of peace, the deaths were

2,468, out of an average force of 10,916 men. The average mortality was 617 per annum, and the ratio per 1000 to the force was 56.

From 1824 to 1826 inclusive the troops were employed in the Burmese war; and the deaths, during these 3 years, amounted to 3,646, out of an average force of 10,144 men. The average of deaths was 1,215 per annum, and the ratio per 1000 of the mean strength was 119.

From the year 1827 to 1838 inclusive, a period of 12 years, there was no war in which European troops were employed, except in 1834, when a small portion were on active service in the Coorg country; but, although they suffered severely, the general results were not materially affected, and therefore the whole of that period may be considered as peace, and the deaths during the 12 years amounted to 6,221, out of an average force of 10,660 men. The average mortality was 518 per annum, and the ratio per 1000 of the mean strength was 48.

From these comparative statements it results that the average mortality, during war, has varied from 49 to 119 per 1000 of the force, and, during peace, from 48 to 70 per 1000; the average of the first period being 82, and of the latter 55 per 1000. If single years be compared, the mortality during war varied from 41 to 143 per 1000, and during peace from 32 to 80 per 1000. It also appears that while the services of the European troops were confined to the Carnatic, during the years from 1793 to 1798, they were, under all circumstances of war and peace, more healthy than they have been since the frontier has been extended, except during the last 12 years, when an almost unbroken peace has prevailed, and the average has been somewhat less than during the period in question.

The following Table will exhibit the above facts at one view:—

Years.	Service.	No. of Years.	No. of Deaths.	Average Annual Mean Strength.	Annual Average No. of Deaths.	Ratio per 1000 of Deaths to Mean Strength.
WAR.						
1793 to 1798	Carnatic	6	1,549	5,696	258	49
1799 and 1800	Mysore and conquered countries.	2	1,548	6,967	774	111
1801 to 1805	General war in the Carnatic, conquered countries, and the Deccan	5	3,691	8,355	738	88
1810 and 1811	French & Dutch Islands	2	1,844	13,328	922	69
1817 to 1819	Pindarie War in the Deccan, and Malwa, in Hindostan	3	2,993	13,585	997	73
1824 ,, 1826	Burmah	3	3,646	10,144	1,215	119
	Total . .	21	15,271	8,796	727	82
PEACE.						
1806 to 1809	Peace	4	2,645	9,318	661	70
1812 ,, 1816	Marching	5	3,460	12,133	692	57
1820 ,, 1823	Peace	4	2,468	10,916	617	56
1827 ,, 1838	Ditto	12	6,221	10,660	518	48
	Total . .	25	14,794	10,781	592	55

2. Native Troops.

The returns for the native troops are complete for a period of more limited duration, but of sufficient extent, and presenting a variety of service, quite sufficient to afford the means of a perfect comparison with the European force. They commence with the year 1822 and close with 1838, a period of 17 years. Of these the two first were years of peace. During the next three, from 1824 to 1826, the Burmese war prevailed. From 1827 to 1833 may be considered a period of peace. In 1834 part of the native force was employed in quelling the disturbances in the country of the Coorg Rajah; and from 1835 to 1837 a large force was employed in the Kimmidy, Palnaud, and Gumsoor Zemindaries. In this, however, as in the Burmese campaign, the increased mortality was caused more by sickness than by wounds.

Statement of the Mean Strength of the Native Troops serving in the Madras Presidency, and of the Number of Admissions into Hospital and Deaths, with the Ratio thereof to the Mean Strength, in each Year from 1822 to 1838.

Years.	Mean Strength.	Admissions.	Deaths.	Ratio per 1000 of Mean Strength.	
				Admitted.	Died.
1822	74,707	54,215	956	725	12
1823	71,377	53,243	1,067	746	14
1824	72,267	78,960	1,583	1,092	21
1825	78,735	121,957	2,689	1,549	34
1826	82,564	106,765	2,095	1,293	25
1827	84,128	53,221	1,362	632	16
1828	76,224	40,848	1,129	535	14
1829	71,945	33,982	841	472	11
1830	67,106	30,745	709	458	10
1831	61,623	29,616	811	481	13
1832	60,678	33,451	969	551	16
1833	60,099	35,915	1,354	597	22
1834	58,854	47,504	1,026	807	17
1835	56,777	42,007	723	739	12
1836	56,844	52,302	1,233	920	21
1837	57,274	36,793	1,049	642	18
1838	58,320	37,490	1,212	642	20
	1,149,522	859,044	20,803	773	18

It will be seen that there has been a considerable fluctuation in the number of native troops during the period in the above Table. In 1822 they amounted to 74,700 men. At the close of the Burmese war, in 1827, they had increased to 84,100, since which time they have gradually decreased, and in 1838 did not exceed 58,300. The average of the whole period was 67,600. The average annual proportion of admissions into hospital, during the 17 years, was 773 per 1000; but if the period of the Burmese war be excluded, it was only 615 per 1000, which is exactly one-third of the proportion among the European force during the same years, and one-third less than among the Dragoons and Dragoon Guards in the United Kingdom. It must, however, be kept in view, that in some instances the Sepoys prefer using native remedies secretly to going into hospital, and that the comparative rarity of venereal affections,

owing to most of the Sepoys being married men, tends to affect this comparison very materially. The extreme cases were in 1825, during the Burmese war, when the proportion rose to 1,549 per 1000, which is equal to two-thirds of the average of European troops in the Madras Presidency, and, on the other hand, in 1830, when it fell to 458.

The total mortality during the 17 years was 20,808, or 1,224 per annum, out of an average force of 67,600 men. The average annual mortality was 18 per 1000; but if the period of the Burmese war be excluded, it will be reduced to 16 per 1000, the same as among troops in the United Kingdom.

The greatest mortality was in 1825, when 2,689 men, out of 78,735, died, or 34 per 1000. The least was in 1830, when 709 men, or 10 per 1000, died. The proportion of deaths to admissions was 2·34 per 100, or 1 in 41, which is rather more favourable than among the European force.

A comparison of the mortality, in years of peace and of war, exhibits nearly the same results as those previously observed among the European force. During 10 years of peace the deaths amounted to 10,410, or 1,041 annually, upon a mean strength of 68,620 men, the ratio per 1000 being 15. On the other hand, during 7 years of war, 10,398 deaths, or 1,485 annually, occurred, among a mean strength of 66,473 men, the ratio being 22 per 1000. The difference is rather less than 50 per cent., or an excess of nearly one half during the period of war.

3. Diseases.

The next point for consideration is the nature of the diseases which have prevailed among the two classes of troops, and the degree in which they have respectively occasioned sickness and mortality. The returns exhibiting these particulars are complete for the 12 years from 1827 to 1838, and the results for that period are stated in the annexed Table.*

The original returns distinguish the diseases most prevalent and most fatal in India, ranged in alphabetical order; but for the purpose of comparing the results with those relating to troops in other parts of the world, contained in Major Tulloch's reports, a different classification has been made, resembling, as far as possible, the arrangement adopted in those reports. The comparison is correct for the most important classes of diseases; and the discrepancies, where they exist, are trifling and all on one side, as in no case can the proportion of any class of diseases be less than the return exhibits, although from some of the more uncommon complaints of each class being included with the miscellaneous diseases, the proportion of one or two classes may fall short of the actual amount. Nevertheless, in order to guard against error, a comparative statement of the two systems of classification is here annexed:—

Classes of Diseases.	Specific Diseases in Official Reports.	Specific Diseases in Madras Medical Returns.
Fevers	Febris, intermittens, remittens, continua communis, and typhus.	Fever, continued, intermittent, and remittent.
Eruptive Fevers .	Variola, Varicella, Vaccina, Scarlatina, Rubella, &c.	Small-Pox alone was distinguished in the last three years.
Diseases of the Lungs	Pneumonia, Pleuritis, Haemoptysis, Phthisis Pulmonalis, Catarrhus, Asthma, Dyspnoea.	Pulmonary Diseases, Thoracic Inflammation.

[Continued at p. 128.]

Statement of the Aggregate Strength of European and Native Troops in the Madras Presidency, of the Total Number of Admissions and Deaths among the whole Force, and of the Annual Ratio per 1000 of Mean Strength, distinguishing the principal Diseases, in the 12 years from 1827 to 1838.

Diseases according to Major Tulloch's Classification.	Diseases, according to Classification in the Madras Medical Returns.	EUROPEANS { Aggregate Strength of 12 yrs. 127,923.				NATIVES { Aggregate Strength of 12 years, 769,872.			
		Admissions.		Deaths.		Admissions.		Deaths.	
		Total Number among whole Force in 12 Years.	Annual Ratio per 1000 of Mean Strength.	Total Number among whole Force in 12 Years.	Annual Ratio per 1000 of Mean Strength.	Total Number among whole Force in 12 Years.	Annual Ratio per 1000 of Mean Strength.	Total Number among whole Force in 12 Years.	Annual Ratio per 1000 of Mean Strength.
Fevers . . .	Fever, Continued . . .	20,018	156*	261	2*04	6,833	8*	304	*39
	„ Intermittent . . .	16,988	132*	181	1*41	127,552	165*	1,835	2*40
	„ Remittent . . .	7,652	59*	272	2*12	12,497	16*	570	*74
	Total* . . .	44,658	349*	711	5*57	146,882	189*	2,709	3*53
Eruptive Fevers . . . . .		. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Diseases of the Lungs . . .	Pulmonary Diseases . . .	549	4*	100	*80	1,862	2*4	280	*36
	Thoracic Inflammation . . .	4,422	34*	199	1*55	1,251	1*6	275	*35
	Total . . .	4,971	38*	299	2*35	3,113	4*	555	*71
Diseases of the Liver . . .	Hepatic Diseases . . .	14,875	116*	720	5*62	729	*9	89	*11
Diseases of the Stomach and Bowels . . .	Colic	3,415	26*	10	*08	3,553	4*6	43	*05
	Diarrhoea	10,053	78*	199	1*55	12,384	16*	662	*86
	Dysentery	24,116	188*	1,923	15*03	7,596	9*6	766	1*00
	Abdominal Inflammation . . .	2,922	22*	120	*93	662	*8	91	*12
	Total . . .	40,506	314*	2,252	17*59	24,105	32*	1,562	2*03
Epidemic Cholera . . .	Cholera	3,510	27*	974	7*6	6,896	9*	3,113	4*04
Diseases of the Brain . . .	Apoplexy	307	2*	157	1*33	210	*3	133	*17
	Cerebral Inflammation . . .	1,048	8*	23	*18	312	*4	11	*01
	Insanity	413	3*	25	*19	957	1*2	45	*06
	Total . . .	1,768	13*	205	1*7	1,479	2*	189	*24
Dropsical . . .	Dropsies	707	5*	138	1*08	2,009	2*6	608	*79
Rheumatic Affections . . .	Rheumatism	13,045	102*	122	*95	40,835	53*	616	*80
Venereal Affections . . .	Syphilis, &c.	24,574	192*	74	*57	18,299	23*	122	*16
Abscesses and Ulcers . . .	Ulcers	9,561	74*	28	*22	32,607	42*	287	*37
Wounds and Injuries . . .	Wounds and Accidents . . .	19,088	149*	73	*57	34,603	45*	174	*22
Punished . . .	. . . . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Diseases of the Eyes . . .	Diseases of the Eyes . . .	9,249	72*	8	*06	8,572	11*	19	*02
Diseases of the Skin . . . . .		. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
All other Diseases . . .	Scrofula	268	2*	3	*02	791	1*	30	*01
	External Inflammation . . .	8,879	69*	24	*19	36,132	47*	110	*18
	All other Diseases † . . .	39,727	316*	587	4*51	116,752	154*	2,205	2*86
	Total ‡ . . .	48,874	387*	614	4*75	153,675	202*	2,375	3*08
Total . . .		235,386	1838*	6,221	48*63	473,901	615*	12,418	16*13

* During the last 8 years 27 per 1000 of Europeans were admitted, and *08 per 1000 died from ephemeral fever. There were admitted from the same cause, of natives, 65 per 1000, and died, *28 per 1000.

† During the last 3 years there were admitted for beriberi, of natives, 4 per 1000, and died, *78 per 1000.

‡ Including fractions.

Classes of Diseases.	Specific Diseases in Official Reports.	Specific Diseases in Madras Medical Returns.
Diseases of the Liver	Hepatitis, Icterus . . .	Hepatic Diseases.
Diseases of the Stomach and Bowels.	Peritonitis, Gastritis, Enteritis, Hæmatemesis, Dysentery, Diarrhœa, Obstipatio, Colica, Dyspepsia, Cholera Morbus.	Colic, Diarrhœa, Dysentery, Abdominal Inflammation.
Epidemic Cholera . . .	Epidemic Cholera . . .	Cholera.
Diseases of the Brain	Phrenitis, Cephalalgia, Vertigo, Apoplexia, Paralysis, Delirium Tremens, Amentia, Mania, Melancolia, Epilepsia.	Apoplexy, Cephalic Inflammation, Insanity.
Dropsies	Anasarca, Ascites, Hydrothorax.	Dropsies.
Rheumatic Affections	Rheumatismus, Lumbago, Ischias, Arthritis, Podagra, Odontalgia.	Rheumatism.
Abscesses and Ulcers	Phlegmon et Abscessus, Apostema Lumbare, Ulcers, Fistula.	Ulcers.

The remaining classes are sufficiently defined, and therefore do not require to be specified. No distinction is made in the Madras returns of the men Punished ; and the Diseases of the Skin are shewn, although in the preceding Table they have been added to the Miscellaneous. With this explanation your Committee will proceed to examine the above Table.

With regard, first, to Europeans, the prominent feature is that Fever is the most prevalent disease in the Madras Presidency, but that Dysentery is by far the most fatal. Fever occasioned nearly one-fifth (19 per cent.) of the admissions, but only one-ninth (11·4 per cent.) of the deaths. Dysentery, on the other hand, was the cause of rather more than one-tenth (10·2 per cent.) of the admissions, and of nearly one-third (31· per cent.) of the whole number of deaths. All the Diseases of the Stomach and Bowels which are specified, including Dysentery, occasioned one-sixth (17·1 per cent.) of the admissions, and more than one-third (36·1 per cent.) of the mortality. The next most fatal disease is Cholera, to which nearly one-sixth of the mortality (15·6 per cent.) is attributable. The admissions from this disease were comparatively few, not exceeding $1\frac{1}{2}$ per cent. of the whole number. Diseases of the Liver are next in order, although they but slightly exceed Fevers in fatality, and fall short of them in frequency by two-thirds. The admissions from this cause amount to one-sixteenth (6·3 per cent.) of the whole number, and the deaths to one-ninth (11·6 per cent.). Diseases of the Lungs are more uncommon and less fatal than in any other station for British troops hitherto examined. The admissions from this cause form only the forty-eighth part (2·1 per cent.) of the whole sickness, and the deaths one-twentieth (4·9 per cent.) of the whole mortality. Diseases of the Brain, although rather uncommon, are generally of a fatal character ; they form a very small proportion of the admissions, but nearly one-thirtieth (3·5 per cent.) of the deaths. The intensity of each class of disease ranks in the following order :—The deaths out of 100 persons attacked with Cholera were 28 (or 1 in $3\frac{1}{2}$) ; with Diseases of the Brain, 11 (or 1 in 9) ; with Dysentery, 8 (or 1 in

12); with Diseases of the Lungs, 6 (or 1 in 16); with Diseases of the Liver, 5 (or 1 in 20); with all kinds of Diseases of the Stomach and Bowels, including Dysentery, $5\frac{1}{2}$ (or 1 in 18); and with Fevers, $1\frac{2}{3}$ (or 1 in 62). The average intensity of all kinds of diseases was 2·6 per cent., or 1 in 38.

With regard to the natives, the proportion both of admissions and deaths to the mean strength, during the 12 years from 1827 to 1838, is exactly one-third of the proportion which prevailed among Europeans. The influence, however, of the several diseases is very different. Among the natives Fevers are both the most frequent and most fatal class of disease, with the exception of Cholera, which surpasses them slightly in mortality. The former occasions nearly one-third (30·7 per cent.) of the whole number of admissions, and more than one-fifth (21·9 per cent.) of the whole number of deaths. Cholera occasions exactly one-fourth of the deaths, but only 1·4 per cent. of the admissions, which is nearly the same proportion as among Europeans. The intensity of this disease, however, is much greater among the natives. The proportion of deaths to admissions among them was 45 per cent. (or 1 in 2·2); among Europeans it was only 28 per cent. (or 1 in 3·6.) Dysentery, and Diseases of the Stomach and Bowels, which caused so much mortality among the European force, are comparatively uncommon, and occasion a much smaller proportion of deaths among the natives. They are, however, considerably more intense in their character. Of the admissions they only form the twentieth part (5·2 per cent.), but of the deaths one-eighth (12·5 per cent.). The proportion of deaths to admissions was 6·4 per cent. (or 1 in 15). There is this further difference in this class of diseases between the Europeans and natives. Among the former dysentery is the chief disease, as regards both admissions and deaths; but, among the latter, diarrhoea, compared with dysentery, is nearly double in frequency and nearly equal in fatality. Diseases of the Liver are very uncommon among the natives, constituting an almost inappreciable proportion either of the sickness or mortality, viz., 0·14 per cent. of the former, and 0·7 per cent. of the latter. They are, however, more than double in intensity among the natives, as 12 per cent. (or 1 in 8) of those attacked died. Diseases of the Lungs occasion less than 1 per cent. (·6) of the admissions, and 4·4 per cent. of the deaths. Diseases of the Brain, compared with the latter, are one-half less frequent (0·3 per cent.) and one-third less fatal (1·5 per cent.) In the former class the intensity is three times as great as among Europeans (18 per cent., or 1 in $5\frac{1}{2}$); in the latter it only slightly exceeds it (12 per cent., or 1 in 8). Rheumatism is a very frequent complaint, occasioning nearly one-twelfth (8·6 per cent.) of the admissions, and one-twentieth (4·9 per cent.) of the deaths. Dropsies cause the same proportion of mortality, but less than $\frac{1}{2}$ per cent. (·4) of the admissions. In intensity they are very fatal, as nearly 1 in 3 of the whole number attacked died, whereas, among the Europeans, the proportion was 1 in 5. It is remarkable that the average intensity of all kinds of diseases is exactly the same as among Europeans, viz., 2·6 per cent., or 1 in 38.

For the purpose of facilitating comparison, your Committee will state these results in a tabular form:—

Relative Per-centage Proportion of Admissions and Deaths from different Diseases, and Proportion of Deaths to Admissions.

Classes of Disease.	Europeans.			Natives.		
	Per-centage Proportion of each Class of Disease to the whole Number.		Proportion of Deaths to Admissions.	Per-centage Proportion of each Class of Disease to the whole Number.		Proportion of Deaths to Admissions.
	Admissions.	Deaths.		Admissions.	Deaths.	
Fevers	19·	11·4	1 in 62	30·7	21·9	1 in 54
Diseases of the Lungs .	2·1	5·	,, 16	·6	4·4	,, 5·6
" " Liver .	6·3	11·6	,, 20	·14	·7	,, 8
" " Stomach & Bowels }	17·1	36·1	,, 18	5·2	12·5	,, 15
Cholera	1·5	15·6	,, 3·6	1·4	25·	,, 2·2
Diseases of the Brain .	·7	3·5	,, 8·6	·3	1·5	,, 8
Dropsies	·3	2·2	,, 5	·4	4·9	,, 3·3
Rheumatism	5·5	1·9	,, 107	8·6	4·9	,, 66
All other Diseases . .	47·5	12·7	,, 140	52·7	24·2	,, 83
Total	100·	100·	1 in 38	100·	100·	1 in 38

This Table shews the relative frequency of sickness and mortality from different diseases, in the same manner that the last Table shewed the actual influence of different diseases upon the whole force.

It remains to examine somewhat more in detail the principal classes of diseases, and to illustrate the results by some comparisons with troops in other parts of the world, for which purpose your Committee have prepared an abstract of the reports upon all the stations hitherto examined in the official reports, which will be found in a tabular form near the close of the present report.—(See p. 141.)

Fevers.—With regard first to fevers, it will be seen from the sub-joined statement extracted from the Table at p. 127, that the most frequent type among European troops is the continued fever; but that it is not so fatal in its character, and does not occasion so many deaths as the “remittent,” although the latter is only one-third as frequent. Among the native troops, however, “intermittent” fever is both the most frequent type, and causes the greatest number of deaths, although it is not as fatal to those attacked as the other types.

Types.	Europeans.			Natives.		
	Annual Ratio per 1000 of Mean Strength.		Proportion of Deaths to Admissions.	Annual Ratio per 1000 of Mean Strength.		Proportion of Deaths to Admissions.
	Admissions.	Deaths.		Admissions.	Deaths.	
Fever, continued .	156	2·01	1 in 76	8	·39	1 in 22
" intermittent	132	1·41	,, 93	165	2·40	,, 69
" remittent .	59	2·12	,, 28	16	·74	,, 22
Total	349	5·57	1 in 62	189	3·53	1 in 54

It does not appear that fevers of an epidemic nature, or of a malignant character, prevailed to any extent among either the European or native troops during the 12 years under review, although during seasons when the troops were in active service, or were still suffering from its effects, as in 1827, after the Burmese war; in 1834, when a portion of the European force was employed against the Coorg Rajah; and in the 4 years from 1834 to 1837, when a large native force was employed in the field, both the sickness and mortality were more than doubled. This will be seen in the following Table of the number of admissions and deaths from all kinds of fever in each year:—

Years.	Europeans.			Natives.		
	Mean Strength.	Ad-missions.	Deaths.	Mean Strength.	Ad-missions.	Deaths.
1827	11,712	5,374	131	84,128	15,722	276
1828	12,171	4,353	86	76,224	12,706	191
1829	11,748	3,482	49	71,945	8,726	164
1830	11,650	3,217	34	67,106	6,976	112
1831	10,775	3,169	39	61,623	5,624	112
1832	10,627	3,026	41	60,678	7,426	141
1833	9,575	3,357	52	60,099	8,768	182
1834	9,821	6,451	114	58,854	20,668	334
1835	9,531	3,704	45	56,777	15,949	266
1836	10,250	2,604	32	56,844	24,346	557
1837	10,068	2,948	46	57,274	10,467	208
1838	9,997	2,973	45	58,320	9,504	166
Total .	127,925	44,658	714	769,872	146,882	2,709
Average	10,660	3,721	59	64,156	12,240	225

The chief increase among both classes of troops, in those years in which an excess prevailed, was occasioned by intermittent fevers.

During the last 8 years of the period, a species of ephemeral fever has been distinguished in the returns, but which, from the distinction not extending over the whole period, and from the character of the disease, which is so fugitive as to last only for a few hours, has been classed with the miscellaneous diseases. It appears, however, to have been rather prevalent among the natives. During the 8 years in which it is noticed, 30,795 natives were admitted into hospital, and 132 died from it. These numbers respectively bear a proportion to the mean strength of 65· and 28 per 1000. Among the European force it was more uncommon and less fatal. The number attacked with it was 2,213, and the deaths from it were 7, which bear respectively to the mean strength a proportion of 27· and 08 per 1000.

Eruptive fevers are not distinguished in the Madras returns; but, during the two years 1837 and 1838, in which small-pox was noticed, there were only seven cases, causing two deaths, among the European force, which then averaged 10,000 men. Among the native force during the same two years, averaging 57,700 men, there were 316 cases of small-pox, causing 14 deaths.

Comparing the Madras Presidency with other countries in which

British troops are stationed, it appears that Fevers are far more prevalent at the former than at any other station in which they do not assume an epidemic form. These exceptions are, Sierra Leone, Jamaica, the Windward and Leeward Islands, the Bermudas, Ionian Islands, and Gibraltar. The following abstract will shew the several stations in the order in which fevers cause mortality in each, among the European troops :—

	Annual Ratio per 1000 of Mean Strength among European Troops.	
	Admissions.	Deaths.
Sierra Leone	1,411	410·2
Jamaica	910	101·9
Windward and Leeward Islands	717	36·9
Ionian Islands	457	13·
Bermudas	136	11·
Gibraltar	161	9·3
Madras Presidency	349	5·5
Malta	173	2·9
Canada	214	2·4
St. Helena.	71	2·2
Cape of Good Hope (Cape District)	88	1·9
Mauritius	154	1·7
Nova Scotia and New Brunswick	69	1·6
United Kingdom (Dragoons and Dragoon Guards).	75	1·4
Cape of Good Hope (Eastern Frontier)	81	1·2

The average number of admissions from all diseases is twice as great, and that of the deaths $3\frac{1}{2}$ times as great, in the Madras Presidency as in the United Kingdom. The admissions from fevers are $4\frac{1}{2}$ times as numerous, and the deaths four times as numerous, in the former as in the latter country. The proportion of deaths to admissions is 1 in 53 in the United Kingdom, and 1 in 63 in the Madras Presidency, from which it results that the form of the disease is generally milder in the latter country.

Although the sickness and mortality occasioned by fever among the native troops in the Madras Presidency is much less than the amount which prevails among the European troops, yet, compared either with European or native troops at other stations, the Madras native army ranks in this respect in the same place, as is shewn in the following abstract :—

	Annual Ratio per 1000 of Mean Strength among Native Troops.	
	Admissions.	Deaths.
Jamaica, Negroes.	47	8·2
Windward and Leeward Islands, Negroes	168	4·6
Madras Presidency, Sepoys	189	3·5
Sierra Leone, Negroes	54	2·4
Cape of Good Hope (Eastern Frontier), Hottentots	66	·7
Mauritius, Negroes	87	Nil.

Diseases of the Lungs.—The Madras returns distinguish only two classes of these diseases, but they embrace all those which are included under the general head in the official reports. These are Pulmonary Diseases, and Thoracic Inflammation. The latter is infinitely more prevalent, and causes a greater mortality, among the European force than the former; while, among the native army, the former is one-third more frequent, and occasions about the same number of deaths.

	Pulmonary Diseases.		Thoracic Inflammation.	
	Europeans.	Natives.	Europeans.	Natives.
Annual Ratio per 1000 { Admissions of Mean Strength . . { Deaths .	4. 80	2.4 .36	34. 1.55	1.6 .35
Proportion of Deaths to Admissions. .	1 in 5½	1 in 7	1 in 22	1 in 4½

Compared with other stations of the British army, the Madras Presidency is peculiarly exempt from this class of diseases. The mortality from this cause is three-fifths less than the mortality from the same diseases in the Mauritius, and five-sevenths less than in the United Kingdom. The several countries rank in the following order:—

	Annual Ratio per 1000 of Mean Strength among European Troops.	
	Admissions.	Deaths.
Windward and Leeward Islands . . .	115	10.4
Bermudas	126	8.7
United Kingdom	148	7.7
Jamaica	85	7.5
Nova Scotia and New Brunswick . . .	125	7.1
Canada	148	6.7
Malta.	120	6.
Mauritius	84	5.6
Gibraltar.	141	5.3
Sierra Leone	56	4.9
Ionian Islands	90	4.8
Cape of Good Hope (Cape District) . .	98	3.9
St. Helena	61	3.4
Cape of Good Hope (Eastern Frontier) .	82	2.4
Madras Presidency	38	2.3

If this comparison had excluded cases of Thoracic Inflammation, and referred to Pulmonary Diseases alone, the exception in favour of India, as regards both Europeans and natives, would have been much more striking.

It is a remarkable fact, that in all the stations in which native troops are quartered with Europeans, with the single exception of the Madras Presidency, the natives suffer a greater mortality from diseases of the lungs than the Europeans. Thus the annual loss per 1000 in the several stations was, respectively, among Europeans and natives,—

	Europeans.	Natives.
Windward and Leeward Islands . . .	10.4	16.5
Jamaica	7.5	10.3
Mauritius	5.6	12.9
Sierra Leone	4.9	6.3
Cape of Good Hope (Eastern Frontier) .	2.4	3.9
Madras Presidency	2.3	.7

It will be a point of much interest to determine whether this remarkable difference arises from a peculiar predisposition among the races of African origin to this class of diseases, from the use of animal food, or from the climate of the Peninsula of India being unusually favourable to persons having a tendency to pulmonary complaints.

In the next volume of the Statistical Reports, now in course of pre-

paration for Parliament, your Committee understand that this subject will be more fully discussed, and that the remarkable influence of the climate of the East Indies in averting Pulmonary Diseases, both among natives and Europeans, will be established beyond a doubt.

The admissions per 1000 among the natives in each country was, in the Windward and Leeward Islands, 99; in Jamaica, 59; in the Mauritius, 139; in Sierra Leone, 51; at the Cape of Good Hope, 107; and in the Madras Presidency, 4.

Diseases of the Liver.—This class of diseases admits but of few subdivisions, and none is made in the Madras returns. It prevails to a considerable extent, and causes a large mortality among the European troops; but among the native soldiers it is very uncommon. It cuts off more than a ninth of the Europeans, and less than 1 per cent. of the natives. The latter, however, are less able to resist it than the former, as 12 per cent., or 1 in 8, of those attacked, died, among the natives, and only 5 per cent., or 1 in 20, among the Europeans. The climate of the East Indies is generally supposed to be peculiarly favourable to the development of these diseases; but it appears from a comparison of the British colonies that, although the number of persons attacked with liver complaints was much greater in Madras than elsewhere, yet the mortality from this cause was even greater among the European troops at Sierra Leone, and among the native troops in the Mauritius. The European troops also in the latter island, and those in St. Helena, suffered two-thirds of the mortality which prevailed in Madras. The following is the order in which the countries rank:—

	Annual Ratio per 1000 of Mean Strength among European Troops.	
	Admissions.	Deaths
Sierra Leone	82	6.
Madras Presidency	116	5.6
Mauritius	82	4.
St. Helena	29	4.
Windward and Leeward Islands	22	1.
Cape of Good Hope (Cape District)	22	1.1
Malta	21	1.1
Cape of Good Hope (Eastern Frontier)	21	1.
Jamaica	10	1.
Ionian Islands	17	.8
Bermudas	14	.5
Gibraltar	13	.4
United Kingdom	8	.4
Nova Scotia and New Brunswick	9	.2
Canada	8	.2

The natives, on the other hand, are less subject to this class of diseases in the Madras Presidency than in any other station. In all, however, except the Mauritius, both the sickness and mortality from this cause is slight.

	Annual Ratio per 1000 of Mean Strength among Native Troops.	
	Admissions.	Deaths.
Mauritius	25	5.7
Western Coast of Africa	4	1.1
Windward and Leeward Islands	7	.9
Cape of Good Hope (Eastern Frontier)	4	.5
Jamaica	2	.4
Madras Presidency	1	.1

Diseases of the Stomach and Bowels.—This class of diseases, next to fevers, forms the most frequent cause of sickness, and occasions a far greater amount of mortality, among Europeans in the Madras Presidency, than any other class of diseases. It is probable that a few of the minor and less common complaints, which are included under this head in the official reports, are not separated from the miscellaneous diseases in the Madras returns; but the four principal diseases are distinguished, and the annual ratio of sickness and mortality, caused by each among Europeans, is shewn in the following statement:—

		Annual Ratio per 1000 of Mean Strength.	
		Admissions.	Deaths.
Colic	26		•08
Diarrhœa	78		1•55
Dysentery	188		15•03
Abdominal Inflammation.	22		•93
Total	314		17•59

The proportion of deaths to admissions by each disease was—

Colic	1 in 341
Diarrhœa	„ 50
Dysentery.	„ 12
Abdominal Inflammation	„ 24

These four diseases occasion one-sixth of the whole amount of sickness, and three-eighths of the whole amount of mortality. But dysentery is the chief cause of both, and must be considered as the most fatal disease among Europeans in this part of India. One-tenth of the admissions, and nearly one-third of the deaths, were caused by this disease alone. It is, in fact, the disease in which many less serious complaints terminate. Repeated relapses of slight bowel complaints at length occasion this aggravated form of disease. Fever and liver complaints, also, are frequently followed by dysentery.

Among the native troops diarrhœa is the most frequent form of this class of diseases, although dysentery causes a somewhat greater mortality, and is more fatal to those attacked. The annual ratio per 1000, to the mean strength, was—

		Admissions.	Deaths.
Colic	4•6		•05
Diarrhœa	16•		•86
Dysentery	9•6		1•
Abdominal Inflammation	•8		•12
Total	32•		2•03

The proportion of deaths to admissions, from each disease, was—

Colic	1 in 82
Diarrhœa	„ 19
Dysentery	„ 10
Abdominal Inflammation	„ 7

Comparing the European with the native troops, the admissions among the former, from all the diseases of this class, were 10 times more numerous than among the latter, and the deaths were nearly 9 times more numerous. Comparing the Europeans with the same class of troops in other countries, the mortality is greater than in any other,

except in Sierra Leone, and the Windward and Leeward Islands, and is 22 times as great as in the United Kingdom, although the admissions are not more than $3\frac{1}{2}$ times as numerous. The order in which the several countries stand is as follows:—

	Annual Ratio per 1000 of Mean Strength among Europeans.	
	Admissions.	Deaths.
Sierra Leone	504	41·3
Windward and Leeward Islands	421	20·7
<i>Madras Presidency</i>	314	17·6
St. Helena	268	13·9
Mauritius	275	10·6
Bermudas	415	5·3
Jamaica	238	5·1
Malta	155	3·6
Ionian Islands	156	3·5
Cape of Good Hope (Cape District)	126	3·1
Ditto (Eastern Frontier)	88	2·3
Gibraltar	186	2·1
Nova Scotia and New Brunswick	94	1·5
Canada	155	1·3
United Kingdom	94	·8
	The same among Natives.	
	Admissions.	Deaths.
Windward and Leeward Islands	93	7·4
Sierra Leone	131	5·3
Mauritius	128	5·
Cape of Good Hope (Eastern Frontier)	90	4·8
Jamaica	17	3·
<i>Madras Presidency</i>	32	2·

Referring to the first part of this Table, which relates to Europeans, dysentery was the principal disease in all the five countries at the top of the list; it appears also to have been the most fatal, though not always the most frequent, complaint among the black troops.

Cholera.—The Madras returns do not distinguish between epidemic cholera and the milder disease of cholera morbus; and it is stated, upon the best authority, that almost every sudden invasion of disease which proves fatal is classed under the head of cholera—a fact which would tend to indicate a careless system of observation, similar to that which in this country so much swells the apparent mortality caused by apoplexy and consumption. It is, therefore, probable, that some portion of cases not belonging to this class are included under this head, and tend, in some degree, to invalidate the comparison between this Presidency and other countries. There can, however, be no doubt that this disease, in its most malignant form, is more general, and recurs more often, in the East Indies than in any other country occupied by British troops. It attacks both Europeans and natives in greater numbers, and with greater severity, than in any other country, but not with equal force; for among the natives the admissions amount only to one-third, and the deaths to one-half, of those which prevailed among Europeans.

In several of the countries occupied by British troops the cholera is happily a stranger. Among those in which it has hitherto appeared it has prevailed to the extent exhibited in the following Table; but as it has only been a transient visitor, and its ravages, during the short period of its prevalence, have been calculated as extending over the whole period examined, during the greater part of which the disease was almost or

entirely dormant, the statement does not give a correct view of the intensity of the disease during the time of its prevalence. In Nova Scotia and New Brunswick, for instance, the epidemic only prevailed in 1834, when it cut off nearly 39 per 1000 of the force; but this mortality, extended over a period of 20 years, makes the annual average ratio only 1·4 per 1000. In Canada it prevailed in 1832 and 1834, and the ratio of mortality, during those two years, was 22 per 1000 of the mean force, although, on the average of the whole period, it was only 2·1.

		Annual Ratio per 1000 of Mean Strength.	
		Admissions.	Deaths.
Madras Presidency	(Europeans)	27	7·6
"	(Natives)	9	4·
Gibraltar	(Europeans)	7	2·2
Canada	(Ditto)	6	2·1
Nova Scotia and New Brunswick	(Ditto)	5	1·4
United Kingdom.	(Ditto)	4	1·2
Mauritius	(Ditto)	9	1·1

As the epidemic form of cholera is liable to great fluctuations, it will be of interest to know to what extent it prevailed in different years. The following statement, therefore, of admissions and deaths in each year is given. The mean strength has been omitted, as it has already been furnished in the Table relating to fevers, at p. 131 :—

Years.	Europeans.		Natives.	
	Admissions.	Deaths.	Admissions.	Deaths.
1827	270	110	560	283
1828	434	117	819	368
1829	231	30	501	213
1830	290	44	262	126
1831	290	91	639	271
1832	533	225	803	333
1833	954	228	1,228	579
1834	135	13	115	58
1835	61	2	12	2
1836	36	3	63	27
1837	173	72	702	351
1838	103	39	1,187	502
Total	3510	974	6,896	3,113
Annual Average Ratio per 1000 of Mean Strength	27·	7·6	9·	4·04

Thus it appears to have occurred in an epidemic form among the European troops at three several periods during the 12 years, and to have prevailed at the same time among both classes of troops. The greatest mortality which it occasioned among the European troops was 2·24 per 1000 of the mean strength in 1832-3, and the greatest mortality among native troops occurred in the same years, and amounted to 7·5 per 1000. In some years it will be seen that the disease was almost entirely dormant. The following abstract exhibits the ratio of admissions and deaths to the mean strength among both classes of troops, at the three periods of preva-

lence, and in 1835-6, when the troops were almost free from the disease:—

Years.	Europeans.		Natives.	
	Admissions, per 1000.	Deaths, per 1000.	Admissions, per 1000.	Deaths, per 1000.
1827-8	29	9.5	8.	4.
1832-3	73	22.4	16.	7.5
1837-8	13	5.5	16.	7.4
Average .	39	12.3	13.	6.1
1835-6	4	.2	.7	.2

Although the disease is much less prevalent, and causes a less amount of mortality, among the native troops, it is greater in intensity, as among that class 1 in 2.2 of those attacked died, and among Europeans only 1 in 3.6.

The latter, it may be remarked, is almost exactly the same ratio of intensity which has been found to prevail in all the European and American stations in which the disease has of late years made its appearance among the troops, as will be seen in the following extract from the official reports:—

In the United Kingdom, 1832-33-34	1 in 3.2
Gibraltar, 1834	,, 3.5
Nova Scotia, 1834	,, 3.5
Canada, 1832	,, 2.8
Canada, 1834	,, 2.9
Honduras (Black Troops) 1836	,, 3.1

So that neither climate nor treatment appear to have had any effect in modifying the fatality of this disease.

Diseases of the Brain.—Of these only three kinds are distinguished in the Madras returns, and as the official reports upon other stations embrace several others, no comparison can be instituted between the Madras Presidency and other countries. It appears, however, that, even with these omissions, this class of diseases is more frequent and more fatal than in any other country, except Sierra Leone, the West India Islands, and the Mauritius. They occasion 7 times more deaths among the European than among the native force, and nearly 7 times more admissions. It is probable that intemperance, which is carried to great excess among the European troops, and which is scarcely ever known among the natives, tends greatly to produce this effect. The natives sometimes use bhang and opium, which cause intoxication; but their use is by no means general. This supposition is strengthened by Major Tulloch's observations upon the effects of delirium tremens, in his report upon the Mauritius. He there shews that, in that island, 16.8 per 1000 of the European troops were admitted into hospitals, and 1.6 per 1000 died, from this disease alone; and, in the Windward and Leeward command, 2 per 1000 died from the same cause. Of the persons attacked in Madras, 1 in 8.6 die among the Europeans, and 1 in 7.8 among the natives. The most frequent form of the disease among Europeans is cephalic inflammation, and among the natives, insanity;

but the most fatal, in both classes, is apoplexy. This will be seen in the following abstract:—

		Annual Ratio per 1000 of Mean Strength.		Proportion of Deaths to Admissions.
		Admissions.	Deaths.	
Europeans	{ Apoplexy	2•	1•33	1 in 2
	{ Cephalic Inflammation	8•	•18	,, 45
	{ Insanity	3•	•19	,, 16
	Total	13•	1•7	1 in 8•6
Natives	{ Apoplexy	•3	•17	1 in 1½
	{ Cephalic Inflammation	•4	•01	,, 28
	{ Insanity	1•2	•06	,, 19
	Total	2•	•24	1 in 7•8

Dropsies.—This class of diseases is proportionately more frequent and more fatal among the natives, compared with Europeans, than most other diseases; but the proportion is still much in favour of the former, among whom the admissions only amount to one-half, and the deaths to four-fifths of the ratio prevailing among Europeans. The proportion of deaths among those attacked was also one-half greater among the former class.

Annual Ratio per 1000 of Admissions . . .	Europeans.	Natives.
Deaths . . .	5•	2•6
Proportion of Deaths to Admissions . . .	1•08	•79
	1 in 5	1 in 3½

Comparing the Madras Presidency with other countries, dropsies appear to be more prevalent, both among Europeans and natives, in the former than in any country, except Sierra Leone, Jamaica, and the Windward and Leeward Islands. They are more than three times more numerous among the European troops, and nearly three times more numerous among the native troops, than among the troops in the United Kingdom. These results are exhibited in the following statement:—

	Annual Ratio per 1000 to the Mean Strength.	
	Admissions.	Deaths.
Europeans:—Sierra Leone	21	4•3
Windward and Leeward Islands	7	2•1
Jamaica	5	1•2
Madras Presidency	5	1•
St. Helena	2	•7
Bermudas	7	•6
Cape of Good Hope (Cape District)	2	•6
Ionian Islands	2	•5
Nova Scotia and New Brunswick	2	•5
Cape of Good Hope (Eastern Frontier)	2	•5
Malta	2	•4
Canada	2	•4
Mauritius	2	•3
Gibraltar	1	•3
United Kingdom	1	•3
Natives:—Jamaica	17	3•
Windward and Leeward Islands	5	2•1
Madras Presidency	2	•8
Sierra Leone	5	•3
Mauritius	3	Nil.
Cape of Good Hope (Eastern Frontier)	1	,,

Rheumatism and Ulcers are, compared with other diseases, more frequent among the natives than among Europeans. Rheumatism occasions 5·5 per cent. of the whole sickness among Europeans, and 8·6 per cent. among the natives. Ulcers occasion 4 per cent. of the sickness among the former, and 7 per cent. among the latter. The intensity of both is likewise much greater among the natives. Of Europeans attacked with rheumatism, 1 in 107 die; and of natives, 1 in 66. Of Europeans attacked with ulcers, 1 in 341 died, and of natives, 1 in 113. Ulcers, however, are much less frequent at present among the native troops than they were in former years; and this improvement may be attributed to a better system of clothing the Sepoys, and to the general amelioration which has taken place in their condition. Venereal diseases occasioned $10\frac{1}{2}$ per cent. of the whole sickness among Europeans, and not quite 4 per cent. among the natives. The proportion of deaths to admissions from this cause was 1 in 332 among the former, and one in 150 among the latter.

These particulars, with reference to each class of disease in different countries, are shewn at one view in the annexed Table (p. 141):—

From the information given in this Table, there will be no difficulty in assigning to the Madras Presidency its proper place among the different dependencies of the British Crown, with respect to the amount of sickness and mortality prevailing among the troops stationed in it. With regard, first, to Europeans, it will be seen that the admissions into hospital are two-fifths less numerous than in Sierra Leone, one-thirtieth less than in the Windward and Leeward Islands, and nearly equal with the number in Jamaica; but that, compared with any other country, they are greatly in excess, viz., one-third more than in the Bermudas; one-half more than in Malta, the Ionian Islands, Mauritius, or Canada; exactly double the United Kingdom, and double, or more than double, any other country.

The proportion of deaths, however, is very different, and a greater reliance may be placed on this comparison, as a difference of practice with regard to admitting men into hospital may prevail in different parts of the British Empire, whereas, with respect to the deaths, no such cause of discrepancy can exist. Compared, therefore, with other countries, the mortality ranks as follows: a tenth of that in Sierra Leone; five-twelfths of that in Jamaica; and five-eighths of that in the Windward and Leeward Islands. On the other hand, it is two-fifths greater than in the Bermudas, or Mauritius; nearly twice as great as in the Ionian Islands, or St. Helena; $2\frac{1}{3}$ times as great as in Gibraltar; 3 times as great as in Malta, or Canada; $3\frac{1}{2}$ times as great as in the United Kingdom, Nova Scotia, New Brunswick, or Cape Town; and nearly 5 times as great as in the Eastern Frontier of the Cape of Good Hope.

The natives suffer one-fourth less sickness than those serving in any other country, except Jamaica, where the proportion of admissions is so few that, as is stated in the official reports, all the slight cases of sickness must have been omitted. Their mortality is considerably less than one-half of that experienced in the Windward and Leeward Islands, or the Mauritius; rather more than one-half of that prevailing in Jamaica and Sierra Leone; and one-half greater than on the Eastern Frontier of the Cape of Good Hope, which appears to be, altogether, the most healthy country occupied by British troops. Compared with the troops

serving in the United Kingdom, the natives in the Madras Presidency suffered only one-seventh greater mortality, although they were engaged, during a considerable portion of the period under review in active service, and possessed much fewer comforts and advantages than the troops in Great Britain. The mortality of each country is respectively as follows:—

	Deaths per 1000 of Strength.	
	Europeans.	Natives.
Sierra Leone	483·	30·1
Jamaica	121·3	30·
Windward and Leeward Islands	78·5	40·
Madras Presidency	48·6	16·1
Bermudas	28·8	··
Mauritius	27·4	37·0
St. Helena	25·4	··
Ionian Islands	25·2	··
Gibraltar	21·4	··
Malta	16·3	··
Canada	16·1	··
Nova Scotia and New Brunswick	14·7	··
United Kingdom	14·	··
Cape of Good Hope (Cape District)	13·7	··
„ (Eastern Frontier)	9·8	10·9

These returns relate only to non-commissioned officers and privates; but it is generally supposed that the mortality among officers bears a nearly uniform proportion to that which prevails among the privates, of about one-third less.* There exist, however, some more certain data with regard to the mortality of officers and civil servants in the Madras Presidency, which have been furnished by Mr. Edmonds, in an article inserted in the *Lancet* (June 23, 1838). The average annual mortality of different grades of European officers during 20 years, from 1809 to 1828, is there stated to be as follows:—

		Deaths per 1000.
Native Infantry—Ensigns		36·
„ Lieutenants		43·9
„ Captains		45·3
„ Majors		48·8
Average		43·2
Cavalry and Artillery, of above ranks		36·1
Staff Officers		49·4
Civil Servants under 45		19·4
„ above 45		51·3

If this statement be correct, the mortality of officers, compared with that of the private soldiers, is much higher in the Madras Presidency than in other countries, as it is also stated by the same authority to be higher than that of officers in the Bengal or Bombay Presidencies.

Your Committee propose, in two or more subsequent reports, to extend their enquiries to the Tenasserim coast and the other stations under the Madras Presidency, which are separated from the Indian Peninsula, and to examine the several stations in the Peninsula separately. They also hope to be able to lay before the Society some account of the sickness and mortality experienced by the troops in the Burmese war of

* On the average of all the stations upon which Major Tulloch has reported, excepting Sierra Leone, the proportion was as 12 to 19 per 1000. In the East Indies it would be higher, as officers have not the same opportunities for retiring and returning home.

1824-26, together with other information of interest which is contained in the papers brought before them by Mr. Annesley.

Before concluding the present report your Committee cannot refrain from expressing a hope that the statements now laid before the public will attract attention to the condition of the British troops and Sepoys in India; that it will stimulate enquiry into the causes of the excessive mortality which prevails among the European portion of that body, and lead to the adoption of remedies, or, at least, to the removal of all unnecessary provocations to disease. They further trust that their labours will elicit similar information from the other presidencies; or if such records are not kept, that speedy measures may be taken to supply the deficiency for the future, so that the authorities who have the power of introducing sanatory measures may be able to judge of the real condition of the service, and to ascertain what steps are necessary and practicable to promote its improvement.

Statistics of the Metropolitan Commission in Lunacy. By Lieut.-Col. SYKES, F.R.S., Vice-President of the Statistical Society of London, &c., Commissioner.

[*Read before the Statistical Society of London, 15th June 1840.*]

THE establishment of a Board so important to the interests of the public, the cause of humanity, and the security and proper treatment of unhappily afflicted individuals, as the Commission in Lunacy, is owing, not less in its original design than in its consolidation and practical working, to the philanthropic zeal and perseverance of Mr. Robert Gordon, M.P. for Windsor, and at present Joint Secretary to the Treasury.

Mr. Gordon moved for a committee of enquiry into the regulation of Lunatic Asylums in 1826-7, during the short administration of Mr. Canning; and the frightful abuses discovered in the progress of the enquiry led to the establishment of the Metropolitan Commission in Lunacy, by the Acts of the 9th and 10th George IV.

Nevertheless, the state of some of the asylums in London and its neighbourhood, owing to certain defects in the mode of systematic and efficient supervision, called for the further interference of Government, not only to secure to the afflicted proper medical treatment, food, comforts, and regulated freedom from restraint, but also to prevent or remedy the oppressions of parties who might work out selfish objects, through the confinement in a mad-house of the imbecile, the ignorant, the helpless, and the unprotected. It will be understood how much it was the interest of parties, with a view to enhance their profits, to place patients under constant restraint, instead of having a proper number of keepers to look after them; how much it was an object to confine the aliment to the lowest and coarsest means of subsistence, to the exclusion of little luxuries and comforts; and that cleanliness and ventilation could scarcely be looked for in the clothes, bedding, or apartments, where these essentials could only be secured by the constant and daily, nay, hourly, labours of a sufficient number of active attendants. To guard against or to remedy the frightful evils of such contingencies, the modified Commission in Lunacy was established by the Acts of 2nd and 3rd William IV., and 3rd and 4th William IV., for three years, and to the

end of the next session of Parliament; and it has since been renewed for a similar term, by the Act of 1st and 2nd Victoria, c. 73.

It is necessary to preface the statistics of the commission with a few words explanatory of its constitution, its powers, and its mode of working, not only that its utility may be more generally known to the public, giving assurance, as it does to the relations of the afflicted, that patients *must have justice done to them*, if the commissioners do their duty, but also with a view to call the attention of the county sessions to the advantage of the establishment of a similar systematic supervision in their counties, and to stimulate them to the maintenance of active relations with the Metropolitan Board. The Commission in Lunacy is appointed annually by the Lord Chancellor, between the 1st and 10th of September, and the nomination must appear in the Gazette within ten days. There must not be above 20 nor less than 15 commissioners. Five must be physicians and two barristers; the rest are selected from gentlemen who can be induced to take upon themselves the gratuitous and painful, but touching and important office. A quorum take a certain specified oath before the Lord Chancellor; and this quorum can then swear in the rest of their colleagues as opportunities offer. The professional gentlemen are paid 1*l.* per hour, while employed. No commissioner can have an interest in any of the establishments; nor can the physicians or barristers attend professionally in any house, unless so directed by the relatives of parties or by the commission. The commissioners have power to grant licenses, and to refuse to renew them, if they see fit, within London, Westminster, Southwark, and Middlesex, and seven miles adjacent. Their jurisdiction, therefore, embraces the following places:—London, Westminster, the county of Middlesex; borough of Southwark, parishes of Brixton, Battersea, St. Mary Magdalen, Bermondsey, Christ Church, Clapham, St. Giles Camberwell, Dulwich, St. Paul Deptford, Graveney, Kew Green, Kennington, St. Mary Lambeth, Mortlake, Merton, Mitcham, St. Mary Newington, Norwood, Putney, Peckham, St. Mary Rotherhithe, Roehampton, Streatham, Stockwell, Tooting, Wimbledon, Wandsworth, and Walworth, in the county of Surrey; Blackheath, Charlton, Deptford, Greenwich, Lewisham, Lee, Southend, and Woolwich, in the county of Kent; and East Ham, Layton, Laytonstone, Low Layton, Plaistow, West Ham, Walthamstow, in the county of Essex; but does not embrace Bethlehem or County Asylums.

The Board has a treasurer and clerk (combined), and an assistant clerk, both of whom are upon oath. The commission has four statute meetings in the year, on the first Wednesday in November, February, May, and July; and five constitute a quorum, two not being physicians; but five commissioners (two not being physicians) can call a meeting at any time. They are bound to visit every asylum at least once a quarter, and may go as often as they please; and they see and examine *every patient*, and tick off their names in proper books kept for the purpose; and not less than three commissioners, one not being a physician, must constitute the visitation. Of course, the owners of asylums never know on what day they will be visited, so that they are always taken unprepared; and as the commissioners never grant a license to any house without being in possession of a ground-plan, and sections of the buildings, there cannot be any places of concealment in which a member of

society might be immured for guilty objects. If the commissioners think any patient sufficiently recovered to admit of being discharged, and the relatives of the party, or the parish officers, in the case of a pauper, refuse to take the patient out, the individual is visited three several times, at certain intervals, and then set free by order of the commission. The commissioners can also visit the asylums by night, upon information, upon oath, of mal-practices. On going through an asylum, either by day or night, the commissioners are required to enter in a book, kept by the licensed proprietor, according to a prescribed form, a minute of the result of their inquiries on the state and condition of the house, as to the care of the patients, religious aid, employment, amusement, and such other particulars of the house and patients visited as they may think deserving of notice; and they must transmit a copy of such minute to the clerk of the commission, stating the length of time occupied, to regulate the fees of the medical and legal commissioners employed. They inspect narrowly, also, the medical weekly journal directed to be kept in each house, and attest it by their signatures.

With respect to persons keeping houses for the reception of insane patients, the following commissions or omissions render them subject to the *penalty of a misdemeanor* :—

Omitting to give a full and complete plan of the whole house, or of additions or alterations.

Keeping a house for receiving two or more insane persons without a license.

Receiving patients without an order and certificate, knowingly and wilfully.

Not making an entry of the person bringing a patient.

Signing a certificate with the intention to deceive.

Signing a certificate, being father, son, brother, partner, or part-proprietor, or the regular professional attendant of the house.

Receiving a pauper patient without an order and certificate.

Neglecting to transmit the order and certificate to the clerk of the commissioners, or visiting the commissioners within two clear days.

Neglecting to report the death or removal of a patient.

Concealing rooms or patients from the sight, knowledge, or inspection of the visiting commissioners.

Persons also are guilty of a misdemeanor, who not being guardians, or relatives, or "committee," receive *one* insane patient without an order and certificate.

They are also guilty of a misdemeanor in case they do not make a private return of such patient within twelve months.

These regulations are sufficiently stringent and minute to insure justice to the patient, order and system in a house, and punishment for neglect; and the precautions taken with respect to the admission of patients are equally characterised by humane considerations for the state of the afflicted and the liberty of the subject.

The order or certificate for the reception of a patient into an asylum must be of a prescribed form; the christian name, surname, and abode of the patient, and of the persons by whose authority the patient was sent, or other circumstances of connexion, must be stated; the name, age, place of residence, and occupation of the patient; whether he had ever

been confined in any other asylum ; whether lunatic under a commission in Chancery ; and, if the certificate be not signed by *two* medical practitioners, the special circumstances why it was not so attested must be stated. Copies of the order given with the patient must be transmitted within two days to the clerk of the commissioners. All patients must be entered in a register. The order for the reception of pauper lunatics is slightly different. To this unhappy and unprotected portion of society, the commission is of more importance than to any other class of patients whatsoever. When once they get shut up in a mad-house, it is indeed difficult for them to regain their liberty.

The commissioners are very rigid in exacting the most minute conformity to the regulations respecting the certificates upon which keepers of lunatic asylums can receive private patients. The supposed lunatic must be examined on the same day by two medical practitioners ; but they must make their examinations individually and separately, and then certify that they deem the patient a proper person to be confined as a lunatic ; nor can the certificate be dated more than seven days previous to the reception of any lunatic into an asylum. In the case of pauper lunatics, they may be put into asylums with fewer forms and restrictions. In the case of criminal lunatics confined in the asylums under the commission, the commissioners have not power to release, but merely to examine and report to the Secretary of State. Every licensed house containing one hundred patients must have a *resident* medical man. Three commissioners (one not being a physician) have the power to summon before them any person to testify upon oath or affirmation, to the truth of such matters as they think it necessary to enquire into, connected with the carrying into effect the objects contemplated by the Act ; and parties convicted before one justice of the peace of refusal to obey summons are subject to a penalty not exceeding 50*l.* nor less than 10*l.*

Proprietors of asylums pay fees for the annual renewal of their license ; and the expenses of the commission beyond the receipts from this source are charged on the Contingency Fund of the Home Office.

The feelings of families are as much respected as possible, and the conditional oath of secrecy taken by the commissioners ensures this object. Nevertheless, any party desirous of ascertaining whether any particular person be confined in any of the asylums under the commission, can, upon the order of one commissioner, go to the clerk of the commission, who, upon the payment of a fee of 7*s.*, is bound to search the registers for the preceding twelvemonths, and give the required information, naming the house, location, &c., and, if required, to supply a copy of the order or certificate upon which a particular lunatic was confined.

The Act of Parliament establishing the Lunacy Commission applies, in its details, to all England, and beyond the jurisdiction of the commission : for the practical working of the Act, the justices in county sessions supply the place of the commissioners, the clerk of the peace supplies the place of the clerk of the commissioners, and the expenses fall upon the county rate instead of the Treasury. The clerk of the peace is subject to a penalty of 5*l.* in case he does not, within 21 days after the annual appointment of visitors to asylums in the county, by the justices in county sessions assembled, make a return of such visitors to the clerk of the Metropolitan Commissioners in Lunacy, who is to

register the same. The clerk of the peace is also bound to prepare and transmit annually in the month of June, to the clerk of the metropolitan commissioners, a complete transcript of the minutes of the county visitors to the several asylums. These minutes are to be kept for the inspection of the metropolitan commissioners, the Secretary of State for the Home Department, or the Lord Chancellor.

The Metropolitan Commissioners in Lunacy are directed, in the month of June annually, to transmit to the Lord Chancellor a report of the state and condition of the several houses licensed by them, and also as to the care of the patients therein, and such other particulars as they shall think deserving of notice. It is from these returns that I am enabled to offer to the Statistical Society the statistics of the commission, which contain some valuable information with respect to the mortality of insane persons. The information is not so complete as might have been afforded, owing to an alteration in the original form of the return after the first two years of the commission, which has disabled me from stating the number and per-centage proportion of the patients annually cured or relieved; and it is, therefore, not necessary to deduce any specific results from the column "Discharged" in the returns. The most ample means exist in the records of the commission for determining the age and previous occupations of the lunatics, with a view of ascertaining whether any particular time of life, or any one occupation more than another, be characterised by mental affections; but I have been utterly debarred from embarking in such a minute and laborious enquiry by the want of leisure; but the day may come when a paper on the statistics of the Lunacy Commission, more worthy than the present, may be presented to the notice of the Society.

Forty-two asylums have been under the supervision of the commission since its first establishment. Some slight changes have taken place, in the abandonment of two or three establishments, and the addition of others. The number in existence on the 30th of May 1839 was 34, the number of patients in which varied from 2 to above 300.

The total number of patients who have appeared on the books of the several asylums under the commission, since its establishment, exclusive of last year, is 7,460, comprising 1,817 male paupers and 2,098 female paupers, 1,994 male private patients, and 1,551 female private patients; the gradually increasing confidence of the public being manifested by the increase of the patients in the asylums from more than 1,400 in 1832-3 to more than 1,700 in 1838-9. Of the above number of 7,460 lunatics, 4,021 have been discharged or removed, between the 31st of August 1832 and 31st of May 1839, viz., 917 male paupers, and 1,088 female paupers, 1,128 male private patients, and 888 female private patients. Unfortunately, with the exception of the first two years, the forms of the returns do not distinguish amongst the discharged, the cured, relieved, or removed (uncured) by relatives or friends; no satisfactory deduction, therefore, can be obtained of the chances of recovery of insane persons. With regard, however, to the annual proportion of discharges, it may be stated that 25 per cent. of the male, and 23 per cent. of the female, paupers, with 24 per cent. of the male, and 22 per cent. of the female, private patients, were annually discharged, the private patients being in each case 1 per cent. less

than the paupers, and the females in each case 2 per cent. less than the males. It is satisfactory to be able to state that the proportion has very materially increased of late years. On the average of the two years 1832-3 and 1833-4, the discharges, both of paupers and private patients, amounted to 21 per cent.; in 1838-9, the discharges of the former had increased to 28 per cent., and of the latter to 31 per cent.

During the two years in which the state of the patients at the time of discharge was noticed the annual per-centage proportions were as follows:—The proportion discharged cured to the number under treatment was, of male paupers, 7·29 per cent., of female paupers, 8·06 per cent.; of male private patients, 7·13 per cent., and of females of the same class, 5·30 per cent. The proportion discharged relieved was, of male paupers, 5·73, and of female paupers, 6·04 per cent.; of male private patients, 8·36, and of females, 8·59 per cent. The proportion discharged as incurable (no notice is taken, or at least no column is given, of discharges for reasons unconnected with the patients' state of mind,) was, of pauper males, 5·60, and of females, 8·52 per cent.; of private male patients, 6·72, and of females, 6·95 per cent. We may venture to hope, although there is no evidence upon this point, that, if the returns had been continued in the same form, they would have shewn that a considerable proportion of the increase in the discharges previously noticed was caused by an increase in the number of cases cured and relieved.

The admissions for 6 years, between the 31st of May 1833 and 31st of May 1839, were 5,386, and the average annual number of patients under treatment on the 31st of May, for seven years, was 1,611; namely, 313 male paupers, 449 female paupers, 446 male private patients, and 402 female private patients. It is worthy of notice and of further enquiry that the number of female paupers exceeds that of the males by one-third, while the number of female private patients falls short of that of the males by a ninth.

I come now to the most marked, and, I regret to say, the most melancholy feature of the statistics of the commission—the per-centage of deaths in the different sexes, and in the two great classes into which the patients are divided—pauper and private. The annual per-centage proportion of deaths for the whole period among the whole number of patients is 10·13; but this average exhibits a wide discrepancy when the per-centage upon the paupers and private patients is taken separately. It is then found that the deaths of paupers amount to 12·76 per cent., and of private patients to only 7·56. And, if the males be separated from the females, it will be found that the male pauper deaths average 15·52, and the females 10·61 per cent.; while the private male patients average 8·73, and female private patients only 6·18 per cent. The same differences run through the several years with pretty general uniformity, although the male pauper deaths, in the year 1836-7, amounted to 17·54, while in 1833-4 they did not exceed 12·16, and in 1838-9 amounted to 12·29 per cent. The highest annual average of the female pauper deaths was 12·90 in 1836-7, and the lowest was 6·62 in 1833-4, but 11·34 in 1839, when the proportion of male pauper deaths was 12·29. The average proportion of pauper deaths of both sexes to the total number of pauper patients is 12·76 per cent. Amongst the deaths of

private male patients the highest annual average was 11·56 in 1836-7, and the lowest 7·22 in 1835-6; 1833-4 and 1838-9 being almost equally low. Amongst the private female patients the highest annual average was 7·65 per cent., in 1832-3, and the lowest, 4·70 per cent., was in 1835-6. In 1838-9 the average only amounted to 5·21 per cent. The year 1836-7 was one in which I believe influenza prevailed, and in which the winter was unusually severe: it proved proportionably fatal to both classes of patients.

The average of all the years produces the following results that deaths amongst males in both classes of patients is considerably greater than amongst females, namely, 11·73 per cent., while the deaths of females is only 8·49 per cent.; but that the deaths of paupers, male and female, exceed that of private patients in the relative proportion of 12·76 and 7·56, namely, 68 per cent.; therefore, for every hundred paupers dying only 59 $\frac{1}{4}$ private patients die. This fearful discrepancy is a matter for serious reflection, and demands careful investigation.

I now come to a part of my subject which is of some interest in a medical point of view, first, to discover the effect of accumulation of large numbers of lunatics under one roof; and, secondly, as different modes of treatment are pursued in different asylums, to observe the comparative success of the different plans. But here again the only test is the comparative number of deaths. By this guide it is observed, from the annual average, and the general average for the whole seven years of each of the five principal houses receiving paupers, and of the five chief houses not receiving paupers, that not only is the average of deaths excessive amongst the paupers, but it is also excessive, though to a somewhat less degree, among the private patients in the houses receiving paupers; whilst in the establishments not receiving paupers, and with limited numbers, the per-centage of deaths is about one-half less than that in the pauper establishments; but the deaths of males preponderate even in the private houses, with the exception of the house No. XXVIII., where the deaths of females exceed those of the males in a corresponding establishment belonging to the same proprietor. There are some differences in the annual and general averages of the five principal private asylums, varying from 7·19 per cent. among the males of one asylum to only 3·81 per cent. among the males of another, and from 6·98 per cent. among the females of one house to 2·74 per cent. among the same sex in another; nevertheless, very curiously, the average per-centage mortality of the whole five houses for seven years was 5·22 per cent. among the males, and 5·29 among the females—an unexpected and merely accidental approach to equality; for in the other private asylums, as in the houses receiving paupers, there is a considerable excess in the mortality among males. The house No. III., conducted on a particular system, lost 9·4 per cent. of the males, and only 2·8 per cent. of the females, during the seven years. The average loss of all the other private asylums was 6·76 per cent. among males, and 4·98 per cent. among females. But I must refer the Society to the ample Tables accompanying the paper, which will enable any member to investigate minutely the details.

In the present paper, in deference to the judgment of others, it has been thought right to distinguish the houses by numbers in Roman letters, instead of giving the names of the owners. The same number remains attached to each house throughout the series of Tables.

TABLE I. Abstract of the Annual Returns of Patients in the Houses Licensed by the Metropolitan Commissioners in Lunacy for the Reception of Insane Persons; shewing the Number under Treatment, and the Number Discharged and Died, with the Proportion of Deaths to Patients, in each Year from 1833 (ended 31st May) to 1839.

Years ended 31st May,	Existing at the Commencement of the Year.						Admitted in each Year.						Total under Treatment in the Year.					
	Paupers.			Others.			Paupers.			Others.			Paupers.			Others.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1833 . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	398	578	976	575	523	1,098
1834	252	381	633	405	397	802	118	132	250	239	174	413	370	513	883	644	571	1,215
1835	260	369	629	439	397	836	251	241	492	200	159	359	481	610	1,091	639	566	1,195
1836	303	433	736	434	394	828	330	217	547	214	159	403	633	630	1,263	678	533	1,231
1837	383	435	818	475	309	784	261	332	593	243	177	420	644	767	1,411	718	576	1,294
1838	355	482	837	432	387	819	202	337	539	265	187	452	557	819	1,376	697	574	1,271
1839	315	541	856	479	423	902	287	261	548	228	172	400	602	802	1,404	707	595	1,302
1840	328	507	835	459	419	878	..	..	..	..	..	..	..	..	..	..	..	..
Total	2,196	3,148	5,344	3,123	2,816	5,939	1,419	1,920	2,939	1,419	1,028	2,447	3,685	4,739	8,424	4,658	3,948	8,606
Average	313	449	763	446	402	848	236	253	489	236	171	407	526	677	1,203	665	564	1,229
Per-centage Proportion of Males to Females }	..	..	..	..	..	..	48.2	51.8	100.	58.	42.	100.	43.7	56.3	100.	51.1	45.9	100.

Years ended 31st May,	Discharged in each Year.						Died in each Year.						Per-centage of Deaths to Total Number of each Class under Treatment.					
	Paupers.			Others.			Paupers.			Others.			Paupers.			Others.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.
1833	78	137	215	116	86	202	68	60	128	54	40	94	17.1	10.4	13.1	9.4	7.6	8.5
1834	65	110	175	155	138	293	45	34	79	50	36	86	12.1	6.6	8.9	7.7	6.3	7.1
1835	95	127	222	153	129	282	83	50	133	52	33	85	17.2	8.2	12.1	8.1	5.9	7.1
1836	149	148	297	154	128	282	113	67	180	49	26	75	15.9	10.3	13.1	7.2	4.7	6.
1837	176	186	362	203	149	352	113	99	212	83	40	123	17.5	12.9	15.	11.5	6.9	9.5
1838	134	176	310	155	113	268	88	102	190	63	38	101	15.8	12.6	13.8	9.	6.6	7.9
1839	200	204	404	192	145	337	74	91	165	56	31	87	12.2	11.3	11.7	7.9	5.2	6.6
1840 . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	917	1,088	2,005	1,128	888	2,016	572	503	1,075	407	244	651	..	..	..	..	..	..
Average	131	155	286	161	127	288	81	72	153	58	35	93	15.5	10.6	12.7	8.7	6.1	7.5
Per-centage Proportion of Males to Females }	45.7	54.3	100.	55.9	44.1	100.	53.2	46.8	100.	62.5	37.5	100.	..	..	..	..	..	..

TABLE II. Aggregate of the Annual Summaries of Patients and Deaths, with the Average Annual Per-centage Proportion of Deaths to Patients, distinguishing Pauper from Private Patients, and Males from Females, in each of the Principal Houses Licensed by the Metropolitan Commissioners in Lunacy, during the Seven Years from 1832-3 to 1838-9.

Houses.	Patients.						Deaths.						Per-Centage Annual Proportion of Deaths to Patients.					
	Paupers.			Others.			Paupers.			Others.			Paupers.			Others.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Receiving Paupers.	199	212	411	90	119	209	34	21	55	12	11	23	17.1	9.9	13.3	13.3	9.2	11.10
IX.	88	122	210	259	281	540	129	121	250	34	25	59	14.5	9.9	11.9	13.1	8.9	10.9
XVII.	1537	..	3491	1219	..	2097	220	..	420	138	..	202	14.3	..	12.7	11.3	..	9.6
XXII. . . . .	..	1954	..	..	878	..	..	200	..	..	64	..	..	10.2	..	..	7.3	..
XXXIII.	1048	1346	2394	459	487	946	186	161	347	65	31	96	17.7	11.9	14.5	14.1	6.3	10.1
XXXV.	13	6	19	24	32	56	3	..	3	3	4	7	23.	Nil.	15.8	12.5	12.5	12.5
Total Receiving Paupers.	3585	4739	8324	2051	1797	3848	572	503	1075	252	135	387	15.5	10.6	12.7	12.4	7.5	10.
Private Houses.	..	..	..	316	215	531	..	..	..	22	14	36	..	..	..	6.9	6.5	6.7
IX. . . . .	..	..	..	153	144	297	..	..	..	11	4	15	..	..	..	7.1	2.8	5.
XVII. . . . .	..	..	..	293	..	479	..	..	..	14	..	27	..	..	..	4.7	..	5.6
XXVII. . . . .	..	..	..	..	186	..	..	..	..	..	13	..	..	..	..	..	6.9	..
XXXIII. . . . .	..	..	..	264	139	403	..	..	..	14	7	21	..	..	..	5.3	5.	5.2
XXXIV. . . . .	..	..	..	524	73	597	..	..	..	20	2	22	..	..	..	3.8	2.7	3.6
XXXVI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total . . . . .	..	..	..	1550	757	2307	..	..	..	81	40	121	..	..	..	5.2	5.2	5.2
III. . . . .	..	..	..	96	71	167	..	..	..	9	2	11	..	..	..	9.4	2.8	6.6
All other Houses	..	..	..	961	1343	2304	..	..	..	65	67	132	..	..	..	6.7	4.9	5.7
Total . . . . .	..	..	..	2607	2171	4778	..	..	..	155	109	264	..	..	..	5.9	5.	5.5

TABLE III.—*Annual Summaries of Patients and Deaths, in all the Houses Licensed to receive Pauper Patients, in each Year from 1832-3 to 1838-9.*

Houses.	Years ended 31st May.	Patients.					Deaths.				
		Paupers.		Others.		Total.	Paupers		Others.		Total.
		M	F.	M.	F.	M.&F.	M.	F.	M.	F.	M.&F.
II.	1833	50	50	17	31	148	9	11	4	6	30
	1834	35	44	17	31	127	4	1	3	1	9
	1835	36	42	16	22	116	8	2	..	1	11
	1836	37	36	23	18	114	2	2	3	..	7
	1837	41	40	17	17	115	11	5	2	3	21
	Total	199	212	90	119	620	34	21	12	11	78
XVIII.	1833	86	154	35	28	303	25	19	8	2	54
	1834	84	142	39	43	308	10	13	5	3	31
	1835	116	163	33	49	361	20	14	6	7	47
	1836	194	111	48	53	436	25	16	4	4	49
	1837	128	219	37	40	424	20	32	3	3	58
	1838	129	213	31	35	408	17	12	..	3	32
	1839	151	189	36	33	409	12	15	8	3	38
	Total	888	1221	259	281	2649	129	121	34	25	309
XXXII. and XXXIII.	1833	176	253	169	120	718	22	13	16	16	67
	1834	162	204	160	127	653	22	11	13	10	56
	1835	205	249	169	107	730	38	24	16	4	82
	1836	239	296	167	101	803	38	31	18	6	93
	1837	277	274	166	116	833	45	30	26	6	107
	1838	233	331	196	149	909	29	47	22	10	108
	1839	245	347	192	158	942	26	44	27	12	109
	Total	1537	1954	1219	878	5588	220	200	138	64	622
XXXV.	1833	86	121	49	70	326	12	17	7	5	41
	1834	89	123	55	75	342	9	9	7	5	30
	1835	124	156	60	72	412	17	10	10	4	41
	1836	163	177	63	61	464	36	18	6	..	60
	1837	194	233	87	65	579	37	32	17	11	97
	1838	190	272	74	70	606	39	43	11	3	96
	1839	202	264	71	74	611	36	32	7	3	78
	Total	1048	1346	459	487	3340	186	161	65	31	443
XII.	1837	4	1	7	11	23	..	..	1	1	2
	1838	5	3	9	12	29	3	..	..	2	5
	1839	4	2	8	9	23	..	..	2	1	3
	Total	13	6	24	32	75	3	..	3	4	10

TABLE IV.—Annual Summaries of Patients and Deaths in each of the Principal Houses Licensed to receive Private Patients in each Year from 1832-3 to 1838-9.

Years ended 31st May,	No. IX.						No. XVII.						Nos. XXVII. and XXVIII.					
	Patients.			Deaths.			Patients.			Deaths.			Patients.			Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1833	34	19	53	3	..	3	22	16	38	..	2	1	42	32	74	2	3	5
1834	44	30	74	4	1	5	27	19	46	2	1	3	34	26	60	1	1	2
1835	44	31	75	4	1	5	21	19	40	5	..	5	39	23	62	..	1	1
1836	46	32	78	1	2	3	19	19	38	1	..	1	44	25	69	3	4	7
1837	48	32	80	7	3	10	18	22	40	1	..	1	47	30	77	4	1	5
1838	58	33	91	2	4	6	22	25	47	2	..	2	40	22	62	3	2	5
1839	42	38	80	1	3	4	24	24	48	..	2	2	47	28	75	1	1	2
Total	316	215	531	22	14	36	153	144	297	11	4	15	293	186	479	14	13	27

Years.	No. XXXIV.						No. XXXVI.						No. III.					
	Patients.			Deaths.			Patients.			Deaths.			Patients.			Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1833	39	22	61	2	1	3	39	23	62	2	1	3	11	8	19	..	..	..
1834	42	23	65	1	1	2	79	9	88	2	..	2	13	10	23	1	..	1
1835	38	20	58	3	3	6	79	9	88	3	..	3	13	9	22	..	..	..
1836	35	20	55	2	2	4	79	10	89	4	1	5	14	11	25	..	1	1
1837	38	18	56	4	..	4	79	9	88	2	..	2	17	12	29	4	..	4
1838	31	18	49	2	..	2	84	7	91	4	..	4	16	10	26	3	1	4
1839	41	18	59	..	..	..	85	6	91	3	..	3	12	11	23	1	..	1
Total	264	139	403	14	7	21	524	73	597	20	2	22	96	71	167	9	2	11

TABLE V.—*Annual Return of the Number of Houses Licensed by the Metropolitan Commissioners in Lunacy, for the Reception of Insane Persons, stating the Number of Patients, Pauper and Private, Male and Female, in each Establishment, with the Number of each Class Discharged or Deceased, from the 11th August 1832 to the 30th June 1833.*

No. of House.	Patients under Treatment during the Year.			Cured.		Relieved.		Discharged Incurable.		Died.		Total Discharged and Died.	Total Remaining on 30th June 1833.
	Paupers and Others.		Total.	Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.			
	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.		
I.	29	29	148 {	1	5	10	5	3	3	9	11	82	27
II. { Paupers { Others	50	50		7	1	2	4	1	11	4	6		66
III.	17	31	19	1	2	2	2	2	2	1	1	5	14
IV.	11	8		1	2	1	1	1	1	1	1		4	25
V.	15	14	29	1	1	2	1	1	1	3	1	8	9
VI.	13	4		1	1	1	1	1	1	1	1		2	2
VII.	2	2	2	1	1	1	1	2	1	1	1	5	12
VIII.	17	17		1	1	1	1	1	1	1	1		2	2
IX.	2	2	2	1	2	1	1	1	1	3	1	10	43
X.	34	19		2	2	2	1	1	1	1	1		3	3
XI.	6	6	6	1	1	1	1	1	1	1	1	1	1
XII.	1	1		1	1	1	1	1	1	1	1		1	10
XIII.	10	7	17	1	1	1	1	2	1	1	1	7	2
XIV.	2	2		1	1	1	1	1	1	1	1		1	2
XV.	1	1	2	1	1	1	1	1	1	1	1	1	4
XVI.	2	3		1	1	1	1	1	1	1	1		2	4
XVII.	3	3	6	1	1	1	1	1	1	1	1	2	36
XVIII. { P { O	22	16		38	1	1	1	1	1	1	1		1	2	201
XIX.	86	151	303 {	5	8	2	9	2	3	25	19	102	13
XX.	35	28		1	2	4	5	4	3	8	2		5	9
XXI.	18	18	18	2	2	2	2	1	1	1	1	5	11
XXII.	14	14		1	1	1	1	2	1	1	1		10	5
XXIII.	10	11	21	3	1	1	1	2	1	1	1	3	14
XXIV.	5	5		1	1	1	1	1	1	1	1		3	4
XXV.	3	3	3	1	1	1	1	1	1	1	1	1	24
XXVI.	1	1		1	1	1	1	1	1	1	1		1	21
XXVII.	9	8	17	1	1	1	1	1	1	1	1	3	12
XXVIII.	4	4		1	1	1	1	1	1	1	1		4	5
XXIX.	42	42	42	7	3	3	6	2	2	2	2	18	24
XXX.	32	32		2	4	2	2	3	3	11	5		21	12
XXXI.	14	3	17	1	3	1	1	1	1	1	1	3	17
XXXII.	20	20		1	1	1	1	1	1	1	1		4	5
XXXIII. { P { O	4	5	9	2	7	7	14	22	16	16	16	100	245
XXXIV. { P { O	176	169	345 {	10	22	31	25	13	13	13	13		254
XXXV.	39	22		61	1	2	2	1	2	2	2	2	8	53
XXXVI. { P { O	86	121	1		2	3	4	14	20	12	17	106		220
XXXVII.	49	70	326 {	1	4	3	3	4	6	7	5	8	54
XXXVIII.	39	23		1	1	2	1	1	1	1	1		1	7
Total. { P { O	398	578	2074 {	23	37	22	19	33	51	68	60	639	1435
	575	523		40	23	39	33	37	30	54	40		

A Similar Return for the Year ended 30th June 1834.

No. of House.	Patients under Treatment during the Year.			Cured.		Relieved.		Discharged Incurable.		Died.		Total Discharged and Died.	Total Remaining.
	Paupers and Others.	Total.		Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.			
I.	M. 28	F. 28	M. & F. 28	M. 2	F. 2	M. 2	F. 2	M. 2	F. 2	M. 2	F. 2	4	24
II. { Paupers 35 41 } 127 {	17 31	23	1 4	2 9	3 4	2 2	4 3	2 4	3 1	2 4	3 1	53	74
III. { Others 13 10 } 23	17 31	23	1 4	2 9	3 4	2 2	4 3	2 4	3 1	2 4	3 1	53	74
IV.	18 16	34	2 1	1 1	1 1	2 2	1 1	2 2	1 1	2 2	1 1	11	23
V.	11 4	15	2 2	2 2	2 2	2 2	1 1	2 2	1 1	2 2	1 1	7	8
VI.	5 5	10	2 2	2 2	2 2	2 2	1 1	2 2	1 1	2 2	1 1	7	8
VII.	14 1	15	1 1	1 1	1 1	2 2	1 1	2 2	1 1	2 2	1 1	7	8
VIII.	2 2	4	2 2	2 2	2 2	2 2	1 1	2 2	1 1	2 2	1 1	7	8
IX.	44 30	74	4 4	6 6	4 4	2 2	4 4	2 2	4 4	2 2	4 4	25	49
X.	4 4	8	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	1	3
XI.	1 1	2	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1	1
XII.	12 6	18	1 1	1 1	1 1	3 3	1 1	1 1	1 1	1 1	1 1	7	11
XIII.	2 2	4	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2	2
XIV.	1 2	3	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1	3
XV.	1 3	4	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1	3
XVI.	2 2	4	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	1	3
XVII.	27 19	46	2 2	3 3	1 1	2 2	2 2	2 2	1 1	2 2	1 1	9	37
XVIII. { P 84 142 } 308 {	39 43	82	3 1	7 5	5 5	4 4	5 3	10 13	5 3	10 13	5 3	91	217
XIX.	19 19	38	1 1	5 5	2 2	2 2	2 2	2 2	2 2	2 2	2 2	8	11
XX.	20 20	40	1 1	7 7	2 2	2 2	3 3	2 2	3 3	2 2	3 3	11	9
XXI.	17 16	33	1 1	6 6	1 1	2 2	1 1	1 1	1 1	1 1	1 1	13	20
XXII.	5 5	10	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1	4
XXIII.	5 5	10	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1	4
XXIV.	2 2	4	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2	2
XXV.	11 12	23	1 3	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	8	15
XXVI.	4 4	8	2 2	2 2	1 1	2 2	2 2	2 2	2 2	2 2	2 2	1	3
XXVII.	34 34	68	2 2	2 2	2 2	2 2	1 1	2 2	1 1	2 2	1 1	7	27
XXVIII.	26 26	52	2 2	5 5	2 2	2 2	1 1	2 2	1 1	2 2	1 1	8	18
XXIX.	12 4	16	2 2	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	5	11
XXX.	23 23	46	2 2	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3 3	3	20
XXXI.	5 8	13	2 2	4 4	2 2	2 2	1 1	2 2	1 1	2 2	1 1	7	6
XXXII. { P 162 160 } 322 {	162 160	322	8 10	9 9	3 11	3 11	22 13	22 13	22 13	22 13	22 13	85	237
XXXIII. { P 204 127 } 331 {	204 127	331	15 17	4 5	4 5	22 17	11 10	11 10	11 10	11 10	11 10	101	230
XXXIV.	42 23	65	4 2	2 2	1 2	2 1	1 1	2 1	1 1	2 1	1 1	11	54
XXXV. { P 89 123 } 342 {	89 123	342	15 6	4 5	14 5	14 5	9 7	9 7	9 7	9 7	9 7	122	220
XXXVI.	79 9	88	3 2	1 1	1 1	2 1	2 1	2 1	2 1	2 1	2 1	10	78
XXXVII.	10 10	20	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	1	9
XXXVIII.	4 4	8	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2 2	2	2
Total . { P 370 513 } 883 {	370 513	883	33 47	51 63	22 17	10 45	42 42	15 50	31 36	15 50	31 36	633	1465

A Similar Return for the Year ended 31st May 1835.

No. of House.	Patients under Treatment during the Year.			Discharged.		Died.		Total Discharged and Died.		Total Remaining.		
	Paupers and Others.		Total.	Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.		
	M.	F.	M. & F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
I.	36	30	30	7	7	8	7	15	7	23	23	23
II. { Paupers	36	42	116 {	6	8	1	2	6	11	31	44	75
Others	16	22		6	8	1	1	6	9	9	7	16
III.	13	9	22	4	2	1	2	4	2	12	16	28
IV.	14	21	35	2	4	1	5	2	5	5	4	9
V.	6	8	14	1	3	1	4	1	4	4	4	4
VI.	8	8	8	4	1	1	4	1	4	9	9	9
VII.	13	1	14	4	1	1	4	1	9	1	1	1
VIII.	1	1	1	1	1	1	1	1	1	1	1	1
IX.	44	31	75	8	8	4	12	9	32	22	54	54
X.	4	4	4	1	1	1	1	1	1	4	4	4
XI.	1	1	1	1	1	1	1	1	1	1	1	1
XII.	12	6	18	3	2	3	2	9	4	13	13	13
XIII.	2	2	2	1	1	1	1	2	2	2	2	2
XIV.	1	2	3	1	1	1	1	1	1	2	3	3
XV.	1	2	3	1	1	1	1	1	1	2	3	3
XVI.	2	5	7	1	1	1	1	2	4	6	6	6
XVII.	21	19	40	2	3	5	7	3	14	16	30	30
XVIII. { P 116 163	33	49	361 {	15	13	20	14	35	27	93	163	256
O	33	49		15	15	6	7	21	22	11	11	11
XIX.	23	23	23	5	2	2	7	16	16	16	16	16
XX.	15	15	15	2	2	4	9	11	11	11	11	11
XXI.	15	20	35	9	5	4	9	6	11	17	17	17
XXII.	5	5	5	1	1	1	2	3	3	3	3	3
XXIII.	4	4	4	1	1	1	1	4	4	4	4	4
XXIV.	2	2	2	1	1	1	1	1	1	1	1	1
XXV.	14	10	24	2	5	1	3	5	11	5	16	16
XXVI.	3	3	3	1	1	1	1	3	3	3	3	3
XXVII.	39	39	39	13	13	13	26	26	26	26	26	26
XXVIII.	23	23	23	2	1	1	3	20	20	20	20	20
XXIX.	11	4	15	4	1	1	5	1	6	3	9	9
XXX.	22	22	22	6	1	1	7	15	15	15	15	15
XXXI.	10	8	18	4	3	4	3	6	5	11	11	11
XXXII. { P 205	169	374	374 {	46	38	84	232	232	232	232	232	232
O	169	374		42	16	58	11	11	11	11	11	11
XXXIII. { P 219	107	356	356 {	57	24	81	245	245	245	245	245	245
O	107	356		26	4	30	16	16	16	16	16	16
XXXIV.	38	20	58	4	1	3	7	4	31	16	47	47
XXXV. { P 124 156	60	72	412 {	27	48	17	10	44	58	111	145	256
O	60	72		19	21	10	4	29	25	111	145	256
XXXVI.	79	9	88	5	3	8	71	9	80	80	80	80
XXXVII.	9	9	9	1	1	1	8	8	8	8	8	8
XXXVIII.	7	7	7	1	1	1	7	7	7	7	7	7
Total { P 181 610	639	2286	2286 {	95 127	83 50	178 177	737 827	1564	1564	1564	1564	1564
O	639	2286		153 129	52 33	205 162	737 827	1564	1564	1564	1564	1564

A Similar Return for the Year ended 31st May 1836.

No. of House.	Patients under Treatment during the Year.			Discharged.		Died.		Total Discharged and Died.		Total Remaining.		
	Paupers and Others.		Total.	Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.		
	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	Total.
I. . . . .	..	29	29	..	4	..	1	..	5	..	24	24
II. { Paupers 37 36 } { Others 23 18 }	37	36	114 {	5	9	2	2	7	11	30	25	77
III.	14	11	25	5	3	..	1	5	4	9	7	16
IV.	20	23	43	6	3	..	1	6	4	14	19	33
V.	10	11	21	3	3	..	..	3	3	7	8	15
VI.	10	2	12	2	..	2	..	4	..	6	2	8
VII.	15	..	15	3	..	1	..	4	..	11	..	11
VIII. . . . .	..	..	..	..	..	..	..	..	..	..	..	..
IX.	46	32	78	13	7	1	2	14	9	32	23	55
X. . . . .	..	4	4	..	..	..	..	..	..	..	4	4
XI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..
XII.	6	10	16	..	4	..	1	..	5	6	5	11
XIII.	2	..	2	..	..	..	..	..	..	2	..	2
XIV.	1	1	2	..	..	..	..	..	..	1	1	2
XV.	2	3	5	..	2	..	..	2	2	2	1	3
XVI.	2	5	7	..	1	..	..	1	2	2	4	6
XVII.	19	19	38	3	3	1	..	4	3	15	16	31
XVIII. { P 191 141 } { O 48 53 }	191	141	436 {	37	32	25	16	62	48	132	93	284
XIX. . . . .	..	26	26	..	10	..	4	21	21	27	32	16
XX.	18	..	18	8	..	1	..	9	..	9	..	9
XXI.	16	20	36	4	5	2	1	6	6	10	14	24
XXII. . . . .	..	5	5	..	..	..	..	..	..	5	5	5
XXIII. . . . .	..	5	5	..	..	..	..	..	..	5	5	5
XXIV. . . . .	..	..	..	..	..	..	..	..	..	..	..	..
XXV.	15	6	21	1	1	..	..	1	1	14	5	19
XXVI. . . . .	..	3	3	..	..	..	..	..	..	3	3	3
XXVII.	44	..	44	13	..	3	..	16	..	28	..	28
XXVIII. . . . .	..	25	25	..	3	..	4	..	7	..	18	18
XXIX.	12	4	16	7	1	..	1	7	2	5	2	7
XXX. . . . .	..	19	19	..	4	..	..	4	..	15	15	15
XXXI.	11	6	17	1	1	1	1	2	2	9	4	13
XXXII. { P 239 .. } { O 167 .. }	239	..	406 {	69	..	38	..	107	..	132	..	246
XXXIII. { P .. 296 } { O .. 101 }	..	296	397 {	35	..	18	..	53	..	114	..	274
XXXIV.	35	20	55	2	1	2	2	4	3	31	17	48
XXXV. { P 163 177 } { O 63 61 }	163	177	464 {	38	42	36	18	74	60	89	117	285
XXXVI.	79	10	89	2	1	4	1	6	2	73	8	81
XXXVII. . . . .	..	11	11	..	3	..	..	3	..	8	8	8
XXXVIII. . . . .	..	10	10	..	4	..	..	4	..	6	6	6
Total { P 633 650 } { O 678 553 }	633	650	2514 {	119	118	101	67	250	215	383	135	1692
	678	553		154	128	49	26	203	154	475	399	

A Similar Return for the Year ended 31st May 1837.

No. of House.	Patients under Treatment during the Year.				Discharged.		Died.		Total Discharged and Died.		Total Remaining.		
	Paupers and Others.		Total.		Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
I. . . . .	..	25	..	25	..	3	..	3	..	6	..	19	19
II. { Paupers	41	40	58	57	30	35	11	5	58	57	..	..	..
Others	17	17			15	14	2	3			..	..	..
III.	17	12	17	12	6	4	4	..	10	4	7	8	15
IV.	25	27	25	27	7	5	..	1	7	6	18	21	39
V.	10	10	10	10	3	2	1	1	4	3	6	7	13
VI.	9	2	9	2	1	..	3	..	4	..	5	2	7
VII.	22	..	22	..	11	..	1	..	12	..	10	..	10
VIII. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
IX.	48	32	48	32	12	10	7	3	19	13	29	19	48
X. . . . .	..	5	..	5	..	1	..	..	..	1	..	4	4
XI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XII. { P	4	1	11	12	..	1	..	..	1	3	10	9	19
O	7	11			..	1	1	1					
XIII.	2	..	2	..	..	..	..	..	..	..	2	..	2
XIV.	2	1	2	1	1	1	..	..	1	1	1	..	1
XV.	2	1	2	1	1	..	..	1	1	1	1	..	1
XVI.	2	5	2	5	..	..	..	..	..	..	2	5	7
XVII.	18	22	18	22	1	6	1	..	2	6	16	16	32
XVIII. { P	128	219	165	259	26	33	20	32	63	79	102	180	282
O	37	40			14	11	3	3					
XIX. . . . .	..	23	..	23	..	7	..	2	..	9	..	14	14
XX.	16	..	16	..	2	..	3	..	5	..	11	..	11
XXI.	20	25	20	25	8	7	1	..	9	7	11	18	29
XXII. . . . .	..	4	..	4	..	1	..	..	..	1	..	3	3
XXIII. . . . .	..	7	..	7	..	2	..	..	..	2	..	5	5
XXIV. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXV.	16	8	16	8	2	2	1	..	3	2	13	6	19
XXVI. . . . .	..	3	..	3	..	1	..	..	..	1	..	2	2
XXVII.	47	..	47	..	17	..	4	..	21	..	26	..	26
XXVIII. . . . .	..	30	..	30	..	11	..	1	..	12	..	18	18
XXIX.	9	4	9	4	2	..	2	..	4	..	5	4	9
XXX. . . . .	..	19	..	19	..	3	..	1	..	4	..	15	15
XXXI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXXII. { P	277	..	443	..	72	..	45	..	191	..	252	..	252
O	166	..			48	..	26	..					
XXXIII. { P	..	274	..	390	..	72	..	30	..	133	..	257	257
O	..	116			..	25	..	6					
XXXIV.	38	18	38	18	7	2	4	..	11	2	27	16	43
XXXV. { P	194	233	281	298	48	15	37	32	131	109	150	189	339
O	87	65			29	21	17	11					
XXXVI.	79	9	79	9	6	2	2	..	8	2	71	7	78
XXXVII. . . . .	..	9	..	9	..	1	..	2	..	3	..	6	6
XXXVIII. . . . .	..	10	..	10	..	4	..	..	..	4	..	6	6
XXXIX.	8	11	8	11	2	..	1	2	1	6	10	16	16
XL.	14	5	14	5	8	2	..	..	8	2	6	3	9
Total { P	611	767	1362	1343	176	186	113	99	575	474	787	869	1656
O	718	576			203	149	83	40					

A Similar Return for the Year ended 31st May 1838.

No. of House.	Patients under Treatment during the Year.				Discharged.		Died.		Total Discharged and Died.		Total Remaining.		
	Paupers and Others.		Total.		Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
I. . . . .	..	21	..	21	..	..	..	2	..	2	..	19	19
II. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	16	10	16	10	8	..	3	1	11	1	5	9	14
IV.	24	25	24	25	6	4	1	2	7	6	17	19	36
V.	8	10	8	10	2	4	..	..	2	4	6	6	12
VI.	7	2	7	2	1	..	1	..	2	..	5	2	7
VII.	13	1	13	1	3	..	2	..	5	..	8	1	9
VIII. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
IX.	58	33	58	33	20	5	2	4	22	9	36	24	60
X. . . . .	..	4	..	4	..	1	..	..	..	1	..	3	3
XI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XII. { Pauper	5	3	14	15	..	2	3	..	6	7	8	8	16
{ Others	9	12	..	..	3	3	..	2	..	..	..	..	..
XIII.	2	..	2	..	..	..	..	..	..	..	2	..	2
XIV. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XV. . . . .	..	3	..	3	..	..	..	..	..	..	..	3	3
XVI.	2	6	2	6	..	..	1	2	1	2	1	4	5
XVII.	22	25	22	25	4	5	2	..	6	5	16	20	36
XVIII. { O	129	213	160	248	29	36	17	12	57	53	103	195	298
{ O	31	35	..	..	11	2	..	3	..	..	..	..	..
XIX. . . . .	..	19	..	19	..	2	..	1	..	3	..	16	16
XX.	15	..	15	..	1	..	4	..	5	..	10	..	10
XXI.	23	32	23	32	9	12	2	2	11	14	12	18	30
XXII. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXIII. . . . .	..	5	..	5	..	1	..	..	..	1	..	4	4
XXIV. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXV.	13	6	13	6	1	1	1	..	2	1	11	5	16
XXVI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXVII.	40	..	40	..	9	..	3	..	12	..	28	..	28
XXVIII. . . . .	..	22	..	22	..	3	..	2	..	5	..	17	17
XXIX.	13	6	13	6	2	..	1	..	3	..	10	6	16
XXX. . . . .	..	20	..	20	..	2	..	2	..	4	..	16	16
XXXI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXXII. { O	233	..	429	..	75	..	29	..	168	..	261	..	261
{ O	196	..	..	..	42	..	22	..	..	..	..	..	..
XXXIII. { O	..	331	..	480	..	71	..	47	..	163	..	317	317
{ O	..	149	..	..	..	35	..	10	..	..	..	..	..
XXXIV.	31	18	31	18	2	1	2	..	4	1	27	17	44
XXXV. { O	190	272	264	342	50	67	39	43	124	136	140	206	346
{ O	74	70	..	..	24	23	11	3	..	..	..	..	..
XXXVI.	84	7	84	7	3	1	4	..	7	1	77	6	83
XXXVII. . . . .	..	8	..	8	..	1	..	1	..	2	..	6	6
XXXVIII. . . . .	..	8	..	8	..	4	..	..	..	4	..	4	4
XXXIX.	7	13	7	13	1	1	1	1	2	2	5	11	16
XL.	9	4	9	4	3	2	..	..	3	2	6	2	8
Total { O	557	819	1254	1395	151	176	88	102	460	429	794	964	1758
{ O	697	574	..	..	155	113	63	38	..	..	..	..	..

A Similar Return for the Year ended 31st May 1839.

No. of House.	Patients under Treatment during the Year.				Discharged.		Died.		Total Discharged and Died.		Total Remaining.		
	Paupers and Others.		Total.		Paupers and Others.		Paupers and Others.		Paupers and Others.		Paupers and Others.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
I. . . . .	..	24	..	24	..	4	..	..	..	4	..	20	20
II. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
III.	12	11	12	11	4	..	1	..	5	..	7	11	18
IV.	29	23	29	23	3	7	3	1	6	8	23	15	38
V.	8	7	8	7	2	..	..	..	2	..	6	7	13
VI.	8	2	8	2	..	..	..	..	..	..	8	2	10
VII.	13	4	13	4	4	2	1	..	5	2	8	2	10
VIII. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
IX.	42	38	42	38	14	9	1	3	15	12	27	26	53
X. . . . .	..	4	..	4	..	1	..	..	..	1	..	3	3
XI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XII. { Pauper Others	4	2	12	11	2	1	..	..	8	3	4	8	12
	8	9			4	1	2	1					
XIII.	2	..	2	..	..	..	..	..	..	..	2	..	2
XIV. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XV. . . . .	..	3	..	3	..	..	..	..	..	..	..	3	3
XVI.	2	3	2	3	..	1	..	..	..	1	2	2	4
XVII.	24	24	24	24	7	3	..	2	7	5	17	19	36
XVIII. { P O	151	189	187	222	29	32	12	15	59	55	128	167	295
	36	33			10	5	8	3					
XIX. . . . .	..	20	..	20	..	5	..	1	..	6	..	14	14
XX.	16	..	16	..	6	..	1	..	7	..	9	..	9
XXI.	17	27	17	27	4	7	1	..	5	7	12	20	32
XXII. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXIII. . . . .	..	4	..	4	..	..	..	..	..	..	..	4	4
XXIV. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXV.	13	6	13	6	..	1	..	1	..	2	13	4	17
XXVI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXVII.	47	..	47	..	14	..	1	..	15	..	32	..	32
XXVIII. . . . .	..	28	..	28	..	4	..	1	..	5	..	23	23
XXIX.	14	10	14	10	5	2	..	..	5	2	9	8	17
XXX. . . . .	..	23	..	23	..	4	..	..	..	4	..	19	19
XXXI. . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
XXXII. { P O	245	..	437	..	87	..	26	..	199	..	238	..	238
	192	..			59	..	27	..					
XXXIII. { P O	..	317	..	505	..	65	..	41	..	174	..	331	331
	..	158			..	53	..	12					
XXXIV.	41	13	41	18	11	2	..	..	11	2	30	16	46
XXXV. { P O	202	261	273	338	82	106	36	32	154	165	119	173	292
	71	74			29	24	7	3					
XXXVI.	85	6	85	6	8	1	3	..	11	1	74	5	79
XXXVII. . . . .	..	8	..	8	..	2	..	2	..	4	..	4	4
XXXVIII. . . . .	..	6	..	6	..	2	..	..	..	2	..	4	4
XXXIX.	9	13	9	13	4	5	..	..	4	5	5	8	13
XL.	8	2	8	2	2	..	..	..	2	..	6	2	8
XLI.	9	5	9	5	1	..	..	1	1	1	8	4	12
XLII.	1	2	1	2	1	..	..	..	1	..	..	2	2
Total. { P O	602	802	1309	1397	200	204	71	91	522	471	787	926	1713
	707	593			192	145	56	31					

An Historical and Statistical Account of the Book-Trade, from the Earliest Records to the Year 1840, with particular reference to Germany. BY M. HENRY MEIDINGER, Foreign Member of the Statistical Society of London.

THE book-trade, when carried on, as it ought to be, for the intellectual and moral improvement of mankind, is certainly the most noble and most beneficial of all branches of commerce. The height at which it stands at the present time has only been reached by degrees. The object of the following statements is to shew its development, progress, and successive changes. The history of the book-trade may be divided into three different periods:—

1. From the earliest records of a trade in manuscripts to the invention of the printing-press, or from B.C. 1040 to A.D. 1440.

2. From the invention of the printing-press and the establishment of the Frankfort and Leipzig book-fairs (1440-1545) to the first German booksellers' association (1765).

3. From the formation of the first booksellers' association (1765) to the foundation and erection of the German booksellers' exchange at Leipzig (1836), and the greater development of the book-trade.

FIRST PERIOD.

From the Earliest Records of a Trade in Manuscripts to the Invention of the Printing-Press, or from B.C. 1040 to A.D. 1440.

In several parts of the Old Testament we find traces of the existence and circulation of books, that is, manuscripts, among the Hebrews in the time of David; but it remains doubtful whether the copyists of the laws and genealogies of the Jewish people (who were chiefly priests) also made copies *for sale*.

Among the *Greeks* we find that the copyists of manuscripts made it their business, not only to sell copies, but also to keep particular writers for the purpose of copying. Diogenes of Laertes mentions that there were, at Athens, public shops, called *βιβλιοπωλεία*, or, by abbreviation, *βιβλία*, in which manuscripts were sold. It appears also to have been a general custom among the learned to meet in these shops, in order to hear the reading of manuscripts (probably for a remuneration), or to hold lectures on new manuscripts. Hermodorus, a disciple of Plato, is said to have carried on a considerable trade in Plato's works, but without the consent of that philosopher, and to have extended their sale as far as Sicily.

In Alexandria, then a central point for men of letters, and a seat of learning, the trade in manuscripts must have been very considerable, since there was a particular market established there for the sale of manuscripts, which was chiefly carried on by Greeks. That trade, however, soon sunk to a mere manufacturing business. A great number of manuscripts were only copied for sale, that is, hastily, without comparing them with the original; and even intentional additions were made in them, of which Strabo complains.

Of the mercantile literary intercourse of the *Romans*, we have more ample and accurate information. In the time of the Republic the

Romans of distinction had copies made by their slaves or by freed men, of all works which they wished to possess.

These copyists were called *librarii*, or *bibliopolæ*, which name was afterwards only bestowed on the *sellers* of manuscripts. The *bibliopolæ* are first mentioned under the reign of the emperors, by several contemporary writers. They belonged, probably, to the freed class of people, who had before solely attended to the copying business.

Cicero, Horace, Martial, Catullus, &c., state the following persons as *bibliopolæ*—the “speculative” Tryphon, the “prudent” Atrectus, the “freed man,” Tul. Lucensis, the brothers Sosius, Q. Pollius Valerianus, Decius, Ulpus, &c. They took particular care to have the copies of manuscripts carefully compared and examined—a task which was often done by the authors themselves. Yet at Rome, also, cheating took place with celebrated names, as we are informed by Galenus. The shops of the *bibliopolæ* were in public places, or frequented streets, as, for instance, in the vicinity of the Temple of Peace, the Forum, Palladium, the Sigilarii, the Argiletum, and principally in the Via Sandalinaria, as stated by Gellius. Here, as at Athens, the learned often met for discussion and lectures. Advertisements of new works were stuck up at the entrance, or upon the pillars in the interior. It appears also that certain sums of money were sometimes paid to the authors, and that several works were the exclusive property of some *bibliopolæ*. Those public sellers of manuscripts were not only to be met with in Rome, but also in provincial towns; and it is highly probable, though it is not recorded, that there were also many of them at Constantinople,* where literature and the arts were much cultivated.

The *Arabs* were famous for their learning, and it was particularly at the time of the Khalifs Haroun al Raschid and Mamoun (at Bagdad), that men of letters were cherished and favoured, without distinction of religious confession. These enlightened princes caused many Hebrew, Syrian, and Greek manuscripts to be translated into Arab, and the costly collections of manuscripts found in later years at Tunis, Algiers, and Fez, as well as those in the library of the Escorial in Spain, shew that great activity must have prevailed at that time in the sale of manuscripts.

After the fall of the Roman Empire, the sciences took refuge in the rapidly increasing monasteries, where many of the monks were constantly occupied in copying manuscripts, and thus laid the foundation of valuable libraries. But the freedom of intercourse was wanting, and it was only in the twelfth century that science again ventured to leave the cloister walls. With the rise of the University of Paris, an increase of sellers of manuscripts, particularly on theological subjects, soon became visible in that city. Pierre de Blois mentions a “*publicus mango librorum*,” and, in the year 1259, special regulations were imposed by the University on these public sellers, called “*librarii, id. stationarii*,” respecting the sale and lending (or letting-out) of manuscripts. New

* The Book-bazaar at Constantinople, in the 19th century, seems to be much the same as in times of old, where some writers are employed in copying manuscripts, and other persons in colouring and glazing them. There is only one book-shop at Galata (a suburb of Constantinople), for European printed books.—*Vide Michaud, Voyage en Orient.*

and more severe laws were published in 1323, from which we learn that by the name of "stationarii" were chiefly meant the booksellers (manuscript-sellers), and by that of "librarii," only book-brokers.

Those laws were sworn to by 29 booksellers and brokers, among whom were two women. At the University of Bologna, also, similar laws, bearing the dates of 1259 and 1289, are on record; and the same existed at Vienna, and, probably, at Salerno, Padua, Salamanca, &c., though they are not recorded.

Not only at the universities, however, but in other towns likewise, the sale and letting-out of manuscripts were carried on extensively, till a stop was put to the trade by an invention which enabled two men to produce, in one day, more copies than 250 writers could have done in the same time. We mean the *printing-press*, which has so eminently contributed to raise Europe to that high station which gives her the ascendancy over all other parts of the globe.

The art of printing seems to have been exercised in China and Japan long before the time of Gutenberg. The Chinese claim to have been acquainted with it as early as the reign of their emperor Wu-Wang, B.C. 1100; but, if it be so, it has never reached a great development, since it still continues there in its primitive imperfection. It may be that it was brought to Europe by way of Venice, and that Gutenberg acquired the secret, in some way or other, during his travels and his long absence from Mayence; but, as long as the fact is not proved, he must, in Europe, be considered as the sole inventor.

Neither has it been proved that Laurence Janszoon (Koster) of Haarlem, introduced that art into Haarlem in the year 1430, and consequently before the time of Gutenberg. On the contrary, the result of several investigations on the subject is wholly in favour of Gutenberg.*

SECOND PERIOD.

From the Invention of the Printing-Press and the Establishment of the Frankfort and Leipzig Fairs (1440-1545) to the first German Booksellers' Association at Leipzig (1765).

John Gutenberg's† great invention, which he seems to have first applied at Strasburg, between the years 1436 and 1442, but which he more extensively developed a few years later in his native town (Mayence), in partnership with John Fust (Faust), a man of fortune, who advanced the necessary capital for the printing establishment, could not fail to be hailed with welcome by all enlightened men in Europe. The Chronicle of Cologne records the year 1440 as the time of the invention, which has been generally adopted as the year in which the first book was printed by Gutenberg, although the work itself is without any date.

Book-printing was at first executed by means of wood tables (made of hard box wood, or pear-tree wood), in which the alphabet was cut out; but Gutenberg himself soon discovered the tediousness and imperfection

* *Vide* "Geschichte des Buchhandels und der Buchdruckerkunst" (History of the Book-Trade and the Art of Book-printing, by Frederick Metz).—Darmstadt, 1834.

† He was descended from a noble family of the name of F. zum Gensfleisch, but he adopted the name of his mother, who also came from a noble family in Mayence, called zum Guten Berg.

of that mode of proceeding, and, by dividing the alphabet, took the single letters out, and used them separately, supplying the decayed letters, from time to time, by new blocks.* The cutting-out of each letter being, however, still attended with great loss of time, Gutenberg made forms of lead, into which he poured some hot metal, which were thus moulded into letters; and Peter Schoeffer (born at Gernsheim, on the Rhine, who was at that time caligraph at the Academy of Paris, for painting the capital letters in manuscripts), when he entered the service of Gutenberg and Fust, and married Fust's daughter, invented a steel stamp, with which he stamped the forms in copper tables, and into these forms, so cut out, he poured the liquid metal, and formed the metal letters.

In the year 1452, Gutenberg and Fust began their great enterprise of printing the Bible (in Latin) with such letters; and, after three years' laborious exertion, they finished it in a splendid style. After that some disputes arose between the partners, and they separated. Gutenberg published, in 1457, an astrological-medical calendar, with the date upon it, and Fust and Schoeffer continued the printing of bibles. Fust went several times to Paris to sell his Bibles, and made a good business of it; but was at length persecuted by the monks and manuscript-sellers, and in 1466 died suddenly in Paris, which induced the monks to spread the report that the Evil One had taken him off.

The inventors at first kept their art a secret; but, in the year 1462, when Mayence was taken by storm and half burnt by Adolphus of Nassau, many of the printers' assistants fled; and the art of printing soon spread to other parts of Germany, and subsequently to Switzerland, Italy, France, Holland, England, &c.

In the year 1530 there were already about 200 printing-presses in Europe. The first introduction of this invention into Italy was at Subbiaco, in 1465; into Paris in 1469; into England (Westminster) in 1474; into Spain (Barcelona) in 1475; into Abyssinia in 1521; into Mexico in 1550; into the East Indies (Goa) in 1577; into Peru (Lima) in 1586; into North America (Cambridge, Boston, and Philadelphia) in 1640, &c. Bibles, prayer-books, works on ecclesiastical history, and school-books were most in demand at this epoch.

One of the most active printers and booksellers of this period was Ant. Kober, at Nuremberg (1473-1513), who had 24 presses, and nearly 100 workmen in his employ, and kept open shops at Frankfort, Leipzig, Amsterdam, and Venice, all conducted with the greatest regularity and order. He had on sale not only works of his own publication, but also works of other publishers. At Ulm and Basle there were likewise several booksellers-carrying on an extensive trade. The many pilgrimages (Wallfahrten) to holy places in the interior of Germany (which were then as much frequented as the sacred shrines in India, and are so still in some Roman Catholic countries) offered them good opportunities for disposing of their books, particularly of those having a religious tendency, which were then printed on cheap linen paper, instead of the

* A number of *fac similia* of the earliest prints are about to be published by Dr. Falkenstein, under the title of "Entstehung und Ausbildung der Buchdruckerkunst," (Discovery and Progress of the Art of Book-printing.) Leipzig, printed for B. G. Teubner.

expensive parchment formerly in use. But it was chiefly at Frankfort-on-Maine, where so many strangers and merchants assembled at the time of the fair, that the book-trade flourished. Ant. Kober, of Nuremberg, Christ. Plantin, of Antwerp, and Stephanus (Etienne) of Paris, are recorded as booksellers visiting the Frankfort Fair, as early as the year 1473.

At the beginning of the 16th century the principal booksellers came from Basle, in Switzerland. One of them, Christ. Froschauer, wrote to Ulrich Zwingli, in 1526, informing him of the rapid and profitable sale of his books at Frankfort, to persons who had sent for them from all parts. In 1549, Operin, of Basle, publisher of the classics, visited Frankfort, and made a profitable speculation. At this period appeared Luther, the great champion of the Protestant world, protesting loudly and openly, both in speech and in writing, against the many abuses that had crept into the church of Rome; and the great cause of the Reformation, while it derived great assistance from the printing-press, repaid this benefit by contributing largely to its development and extension. Saxony, with its enlightened universities (Wittenberg and Leipzig), now became the seat and central point of free theological discussion and investigation, and the booksellers soon found it worth their while to visit also the Leipzig fair. Besides, the literary intercourse in that country was free and unfettered, whilst, at Frankfort, it had to contend, in later years, with several difficulties, arising from the peculiar situation of a smaller state, and the restrictions and vexations of an Imperial Board of Control (*Kaiserliche Bücher Commission*) established by the German emperor, through the influence of the Catholic clergy. Archbishop Berthold, of Mayence, had previously (in 1486) established a similar censorship in his dominions. The chief object of that Board was to watch and visit the book-shops, which, in Frankfort, were all situated in one street, still called the *Buchgasse*, seizing forbidden books, claiming the seven privilege copies, and, in fact, exercising the power of a most troublesome police, against which the booksellers often remonstrated, but without success. At length the principal part of the book-trade withdrew to Leipzig. The last visit of any Saxon bookselling house of renown to Frankfort was made by the *Weidmannsche Buchhandlung*, in the year 1764.

The first accurate information respecting the Leipzig book fair begins with the year 1545, when the booksellers, Steiger and Boskopf, of Nuremberg, visited the fair. In 1556, Clement of Paris, and in 1560, Pietro Valgrisi of Venice, resorted thither.

In 1589 the number of new works brought to the fair was 362, of which 200 were upon theological subjects, 48 on jurisprudence, and 45 on philosophy and philology. Of the whole number 246, or 68 per cent., were written in the Latin language.

In 1616 the number of new works was exactly doubled. Of the whole number (731), 369 were upon theology, 67 on jurisprudence, and 99 on philosophy and philology. The number of works on history, geography, and politics, had increased from 25 to 78, and those on physics and medicine from 19 to 40.

In 1616 there were 14 printers and booksellers residing in Leipzig.

The chief publishers there were—Jac. Apel, Joh. Boerner, Elias Rehfeld, Joh. Eying, Christ. Ellinger, Henning Grosse, jun., Grosse, sen., Abr. Lamberg, Casp. Klosemann, Barth. Voigt, and Joh. Perfert, who brought to the catalogue of the Easter fair, in 1616, 153 new works, which they had published at Leipzig. The number of publishers, of some consideration, in other German towns, in 1616, is stated as follows:—In Frankfort-on-Maine, 8; Nuremberg, 7; Jena, 4; Ulm and Hamburg, each, 3; Wittenberg, Strasburg,* Gotha, Cologne, and Breslau, each, 2; Lübeck, Goslar, Rostock, and Luneburg, each, 1.

The number of publishers from abroad is not mentioned in the Leipzig catalogue, but the number of their publications is given, viz., from Venice, 57 new works; from France, 47 (including Lyons, with 13); from Holland, 38; from Switzerland, 22; from England, 4. Unfortunately, the 30 years' war checked the book-trade of Leipzig and of all Germany. After that most calamitous war, the trade in books between Leipzig and the Roman Catholic countries of Europe, including Italy (Venice), almost ceased, and with France it greatly diminished. On the other hand, a new extension took place with Protestant countries, particularly with Holland (Leyden and Amsterdam), and the interior of Germany.

This is exhibited in a marked manner by a comparison of the year 1616 with 1716, after an interval of a century. The number in the latter year was only 558. The greatest decrease was in theological works advocating Roman Catholic doctrines, which had dwindled from 135 to 1. Protestant theological works, on the other hand, had maintained their former number. At this period the proportion of Latin works had very much diminished: out of 558 only 157, or 28 instead of 68 per cent., were written in that language. It is worthy of remark that, at the three periods mentioned, not a single work on philosophy or philology, written in the German language, is enumerated. Latin alone was used in treating of those subjects. At the next period, which will presently be noticed, such works in German were very numerous.

THIRD PERIOD.

From the Establishment of the first German Booksellers' Association (1765) to the Foundation and Erection of the German Booksellers' Exchange at Leipzig (1836), and the greater development of the Book-Trade.

A partner of the Weidmannsche Buchhandlung at Leipzig, Phil. Erasmus Reich, gave in 1765 the first impulse to the German Booksellers' Association (Deutschen Buchhändler Verein).

The laws and regulations of that association were drawn up in the same year, and signed by 59 booksellers. A secretary was elected annually, and their meetings were held at the "Quandt's Hof" in Leipzig. Its chief object was directed against all counterfeit works (Nachdruck), and particularly against an Austrian bookseller at Vienna, of the name of J. Thom. Edler von Trattner, who carried on the counterfeit business openly and extensively.

* At that period Strasburg and all Alsace still belonged to Germany, and the German language had prevailed there from a remote age.

After the death of Reich, in December 1787, a temporary stop took place in the intercourse of the booksellers at Leipzig; but P. G. Kummer, of Leipzig, renewed it in 1792, by hiring several rooms in Richter's Coffee-house for the meetings of the Leipzig booksellers; and C. C. Horvath of Potsdam, another active bookseller, founded a similar establishment in 1797, in the Pauliner Hof (Paulinum) for all other booksellers from Germany and from abroad.

How far the establishment of this association contributed to the rapid increase of the book-trade of Leipzig at this period, and to what extent that increase was owing to the general development of knowledge in Germany, and a greater thirst for literary and scientific acquirements, cannot be separately distinguished; but in 1789, after an interval of 63 years, the number of new publications brought to the Leipzig fair had nearly quadrupled, having risen from 558 to 2115; and, compared with 1616, it had trebled. Theological works continued to be very numerous, although their proportion, from the greater increase of other publications, was diminished. The proportion of Latin works had fallen off from the same cause to 9 per cent.; their actual number had increased from 157 to 193. In this year, German works on philosophy and philology are first mentioned. Several other classes of publications also, which were not brought to the fair, or were not distinguished, in 1716, are noticed in this year; they consist of books on mathematics, natural history and agriculture, German poems, novels and theatrical publications, works on education, and critical journals.

In this year the following towns produced the greatest number of the new works noticed in the Leipzig catalogue:—

Leipzig . . . 355	Hamburg . . . 56	Hanover . . . 36
Berlin . . . 261	Nuremberg . . 55	Erlangen . . 35
Vienna . . . 101	Augsburg . . . 50	Brunswick . . 30
Frankfort . . 100	Breslau . . . 48	Gotha . . . 29
Halle . . . 61	Strasburg . . 41	Tubingen . . 27
Göttingen . . 56	Dresden . . . 36	Jena . . . 24

and of foreign countries—

Switzerland (Basle, Zurich, Berne, St. Gall, Winterthur) . . . 91
France (Paris, Lyons, Strasburg) 52
Denmark (Copenhagen, Flensburg) 45
Poland (Warsaw) 12
Hungary (Presburg, Pesth) 12
Liefland (Riga) 9
Holland (Amsterdam, Leyden) 9
Italy (Turin, Pavia) 6
England (London) 2

In 1778 the number of sellers of books, prints, and music, in Germany and the adjacent countries in connexion with Leipzig, is stated to have been 282; in 1795 it had increased to 332; and in 1822 it was 566.

We may insert here a classified list of the new works brought to Leipzig in 1789, and in the years previously noticed, which has been extracted from the fair catalogue, and published in Kochler's "*Beiträge zur Ergänzung der Deutschen Literatur*" (*Contributions to a complete Exposition of German Literature*), vol. i. p. 234.

Description of Works.	1589	1616	1716	1789
Theology, Latin, Protestant	44	72	51	22
——— German, ditto	76	162	192	251
——— Latin, Roman Catholic	65	117	1	14
——— German, ditto	15	18	..	74
Jurisprudence, Latin	45	63	23	32
——— German	3	4	10	127
Physics and Medicine, Latin	17	33	16	66
——— German	2	7	42	142
History, Geography, and Politics, Latin	18	47	22	17
——— German	7	31	72	301
Philosophy and Philology, Latin	45	99	41	40
——— German . . . . .	..	..	..	155
Mathematics . . . . .	..	..	..	57
Natural History, Agriculture, &c. . . . .	..	..	..	131
Poems, Latin	12	30	3	2
——— German . . . . .	..	..	..	35
Novels and Theatrical Works . . . . .	..	..	..	276
Education . . . . .	..	..	..	69
Critical Journals . . . . .	..	..	..	136
Works on Arts, and Miscellanies.	13	48	85	168
Total	362	731	558	2,115

At the end of the eighteenth century and the beginning of the nineteenth, the French intrusion, and the oppressive system of the new Imperial French government, spread over Germany, checking all freedom of literary intercourse. A respectable bookseller of Nuremberg (J. Phil. Palm) was shot on the 26th August, 1806, by order of Napoleon, merely for having forwarded a political pamphlet directed against the despotism of the French. After the downfall of Napoleon, the German press soon recovered from its forced lethargy, and has since produced works which will always rank high in the estimation of nations.

At the Easter fair of 1825 the German booksellers' corporation was, by the exertions of Fred. Campe of Nuremberg, of Horvath and others, united into one public body under the name of "Boersenverein der Deutschen Buchhändler" (Exchange Union of the German Booksellers). Campe drew up their regulations, which were revised in 1831, and at the anniversary meeting, in 1838, published as the "Statuten für den Boersenverein vom 14 März 1838" (Statutes of the Exchange Union, 14th March 1838).

The number of its members was 409 in 1832, and 611 in 1839, an increase of one-half. The number in each of the intermediate years was as follows:—

1833	432	||	1836	570
1834	454		1837	606
1835	504		1838	607

On the 26th October, 1834, the first stone was laid at Leipzig of the new exchange building for booksellers (Deutsche Buchhändler Boerse), which was opened in April 1836. Each member pays two dollars annually, and 5 dollars upon admission. Before he is received he must

prove his establishment as a bookseller by a printed circular, signed by himself and the authorities of his town, and must send to the secretary a written obligation to adhere to the regulations of the society, not to meddle with counterfeits, and, in case of a dispute, to submit to arbitrators named by the committee. They have a printed journal of their own, "*Boersenblatt für den Deutschen Buchhandel*," published, from the 1st January 1834, weekly; from the 1st January 1837, twice a week; and during the Easter fair, daily; containing all government publications respecting the book-trade in Germany and abroad, many statistical accounts, advertisements of new works, of old works wanted, &c.

The first printed catalogue of all the books brought to the Frankfort Fair appeared at that town in the year 1564, published by Geo. Willer of Augsburg. That catalogue was continued till 1597, when it was followed by a general Fair catalogue, "*Allgemeines Messverzeichniss aller Bücher, so zu Frankfurt am Main verkauft worden*" (General Catalogue of all the Books which were sold at the Fair at Frankfort-on-Maine), published by Peter Kropf, up to 1604.

At Leipzig a similar catalogue was printed in 1598, to which a special privilege was granted in 1600. From that time it has appeared annually, and since the middle of the eighteenth century it has been edited by one house (*Weidmannsche Buchhandlung*). It is published in two parts. The first part appears at Easter, and the second part in autumn, under the following title:—"Allgemeines Verzeichniss der Bücher, welche von Michaelis 1839 bis Ostern 1840, neu gedruckt oder neu aufgelegt worden sind, mit Angabe der Verleger, Bogenzahl, und Preise, nebst einem Anhang von Schriften die künftig erscheinen sollen" (General Catalogue of the books which have been printed or reprinted from Michaelmas 1839 to Easter 1840, with the names of the publishers, the number of sheets, and the prices; together with an Appendix containing a list of the works which are about to appear); Leipzig, in der *Weidmannschen Buchhandlung*."

This catalogue contains an alphabetical list of the publishers, and of the new works published by them, with the number of sheets and the shop-prices; also an alphabetical register of the names of the authors, and a separate list of all new novels, and of new works printed abroad (foreign literature).

Another and more correct catalogue is that of Hinrichs, which also, since 1797, has appeared twice a year (at the Easter fair and at the autumn or Michaelmas fair), and contains only the books that have really appeared (excluding those merely advertised, which are inserted in the *Weidmannsche* catalogue); though in Hinrichs's also the same works are sometimes inserted under two or three different titles. The *Hinrichssche* catalogue appears under the following title:—"Verzeichniss der Bücher und Landkarten, welche vom Jan. bis Juni 1839 (und vom Juli bis Decbr. 1839), neu erschienen oder neu aufgelegt worden sind, mit Angabe der Bogenzahl, der Verleger, der Preise, &c., literarischen Nachweisungen und einer wissenschaftlichen Übersicht, Leipzig, 82te und 83te Fortsetzung, 1839" (Catalogue of the books and maps which have appeared or been reprinted from January to June 1839 (and from July to December 1839), with a specification of the number of sheets, the publishers and prices, &c., together with literary

intelligence and a scientific review. J. C. Hinrichs, Leipzig, 82nd and 83rd part, 1839).

The following lexicons serve as guides (to booksellers) for works already published:—

Theophili Georgi.—"Allgemeines Europäisches Bücher Lexicon" (General European Book Lexicon), published by Georgi, Leipzig, 1742, fol.; containing all the older works, with their dates and prices, and number of sheets.

Kayser.—"Bücher Lexicon" (Book Lexicon), Leipzig, 1835, 6 vols. 4to., published by Louis Schumann; containing all works from 1750 to 1832.

Heinsius.—"Allgemeines Deutsches Bücher Lexicon oder vollstaendiges Alphabetisches Verzeichniß aller von 1700 bis zu ende 1834, in Deutschland und in den angrenzenden mit Deutschen Sprache und Literatur verwandten Laendern, gedruckten Bücher" (General German Lexicon of Books, or a complete Alphabetical Catalogue of all Books printed in Germany and in the adjoining countries connected with the German Language and Literature, from 1700 to the end of 1834), published by Heinsius since 1793.

It may not be uninteresting to give an insight into the mode in which the book-trade of Germany is carried on.

It is divided into—

1. The publisher's business (Verlagsgeschäft).
2. The bookseller's business (Sortimentshandel).
3. The agencies (Commissionsgeschäft).

The first two branches are frequently united, and often all three are carried on together. The business of the publisher needs little description. He buys the manuscript from the author, and gets it printed, either by his own presses or by other parties for his account, and sends copies to such booksellers as he thinks likely to sell the work. The invoice is put on the outside of the parcel, half folded up, so that only the head, bearing the name of the bookseller to whom it is directed, and the name of the publisher from whom it comes, is to be seen. The parcels are all put in one bale, and sent to the publisher's agent in Leipzig, who distributes them to the different agents in that town. It will be seen in one of the accompanying Tables, that every respectable bookseller of Germany employs an agent in Leipzig. Such copies of new works are called "*Nova*;" on the invoice is put "*pr. Nov.*" (*pro Novitate*). They are sent "*à condition*" (*à cond.*), that is, with the option to keep them or to send them back (*zu remittiren*), after some time.

By these conditional consignments private persons have the advantage of being able to look into the merit of a work before they are called upon to buy it, whereby new publications get to all parts of Germany, and at the same price as at the place of publication—a system which is quite peculiar to the German book-trade, and which has certainly much contributed to the diffusion of knowledge in Germany. The prices are put down either at the shop-price or net price. On the shop-price (*ordinair*) a discount of one-third, or 33½ per cent., is usually allowed by the publishers to the trade for books, and for prints and journals,

one-fourth, or 25 per cent. Books already published for some time are seldom sent out *à condition*, but must be ordered, which is done by sending a small slip of paper (*Verlangszettel*), containing the name of the publisher, the name of the bookseller who orders, and the title of the work, to the agent of the publisher, who transmits the work by the first opportunity, and, if quickly wanted, by post.

Every publisher of note sends some copies of his publications to his agent in Leipzig, in order that he may execute without delay any orders which may come in; so that the shortest and cheapest way of procuring a work is generally by sending to Leipzig for it.

The book-trade of Germany is divided into the *northern* and *southern* districts. Many of the northern publishers have a separate agent at Berlin, and many of the southern have agents at Nuremberg, Frankfurt, Vienna, Stuttgart, &c. The latter town at present enjoys a high reputation for the activity of its booksellers, and the number of men of letters who reside there.*

The book-trade of Stuttgart has had a gazette of its own since 1837, intended particularly for the south of Germany (*Süddeutsche Buchhandler Zeitung*); and there is some intention of establishing a book-fair also at Stuttgart, for the booksellers of the south of Germany and of Switzerland, many of whom do not visit Leipzig, on account of its being so distant.

The book department is so very intricate, that the chief booksellers of Germany consider it best, for the sake of facility to all parties concerned, to visit the fairs of Leipzig personally, or to send a confidential clerk to settle their accounts there with their agents, and with other booksellers from the interior and from abroad, with whom they are connected, and whom they usually meet at the Easter fair (Leipzig has three fairs annually, but the Easter fair has been fixed upon for regulating the booksellers' accounts), or to arrange with them respecting new publications, &c.

About fifty years ago the new publications were only forwarded to Leipzig at the time of the Easter (*Jubilatemesse*) and autumn fair (*Michaelismesse*), which has now been changed to monthly, or even more frequent, transmissions. Many thousand bales of printed books

* Among the former was J. G. Cotta, a name of high renown in Germany and throughout Europe. He was a descendant of an old Italian family established at Tübingen, where his family carried on the book-trade for nearly 200 years. He received a good education at the University of Tübingen, and possessed an enlightened understanding and a liberal generous mind. He patronized Schiller, whose "*Horen*" he published in 1795. In 1797 he published Schiller's "*Musen Almanach*," and, later, the works of Goëthe, Herder, Johannes Müller, &c. In the year 1795 he first published a political paper, called "*Posselt's Europäische Annalen*" (*Posselt's European Annals*), which name was afterwards (in 1798) changed into that of the "*Allgemeine Zeitung*," which still enjoys the reputation of being the first political paper of Continental Europe, with regard to the accuracy of its information and the number of its foreign correspondents. He left, after his death, in 1832, four establishments, at Tübingen, Stuttgart, Augsburg, and Munich. In the first three towns, under the name of J. G. Cotta'sche Buchhandlung (Cotta's Book-shop), and in the latter (Munich) under the name of "*Literarische Artistische Anstalt*" (*Literary and Artists' Institution*). He likewise published a literary paper of renown, "*Das Morgenblatt*" (since 1806), to which are added as supplements, "*Das Kunstblatt*," and "*Das Literaturblatt*."

arrive annually at Leipzig, and are again sent away from it. The books taken or ordered conditionally (*à cond.*) were regularly returned at the Easter fair, whilst now many booksellers take the liberty to extend that period, and to return such books, called "Remittenden," or jocosely, "Krebse" (crabs), after two or three years, to the publishers; so that several of the latter are almost inclined not to send out any more of their publications unless they be ordered, which, however, cannot be done without injury to themselves and to the trade at large, or without a total change in the present system.

In the first part of the eighteenth century several means were resorted to, by some publishers, to dispose of publications, either by lowering the prices or by selling the books by lotteries, or through Jews and brokers. But a still greater evil arose from the numerous counterfeits of works of renown. Several privileges were granted for the protection of publishers; the first, in 1496, by the German emperor. A privilege was also granted in 1527, by Duke George of Saxony, to Dr. Emser, for his "New Testament," published by Wolfgang Stoeckel, Dresden; and Luther received likewise a full privilege for his "Translation of the Bible," printed by Hanns Lufft, at Wittenberg, in the year 1534.

The nefarious copying of printed works was, however, carried on for years, to the great detriment of respectable publishers. These counterfeits were principally produced at Vienna, and at Reutlingen, in Würtemberg.

It is only between the years 1832 and 1836 that the counterfeiting of such works has been prohibited in Austria, Prussia, Würtemberg, Baden, and most of the minor states of Germany; and strong hopes are entertained that it will soon be abolished throughout the whole of Germany. The year 1842 has been fixed upon by the Diet for that purpose.

The number of booksellers has so much increased within the last twenty years, that many respectable booksellers are complaining of swindling, underselling, and other irregularities in the trade; but in that respect the book-trade may be said to suffer under the same evil as nearly all other branches of commerce, arising from an increasing population and from a more general competition.

Many circumstances have of late operated in favour of the book-trade, viz. —

- 1st. The extension and improvement of instruction among all classes of people.
- 2nd. The scientific pursuits of many unlettered persons.
- 3rd. The cheap publication of classical works, and particularly the penny literature.
- 4th. The encyclopedias, reviews, magazines, and journals of all kinds.

And, finally, the more elegant appearance of books adorned with steel engravings, wood-cuts, and lithographic illustrations.

But one great and important check and hindrance to literary productions still exists in Germany, viz., the censorship of the press, which is exercised in every State belonging to the German Confederation. Each

journal and publication under 20 sheets, whatever be the subject of which it treats, politics, literature, arts, or science, must be sent in manuscript to the censor, who strikes out what he thinks proper before the printing of it is allowed. The delay, and frequently arbitrary or capricious interference, arising from this system are evident; nor can it be denied that much bad feeling and discontent are thereby created. Moreover, not only all German books published in the country are subject to this censorship, but in some of the States all books imported from other States belonging to the German Confederation are similarly treated. In Austria, for instance, all books coming from Prussia, or from the minor States of Germany, are considered as foreign books, and are subject to a second censorship in that country. They are either admitted free by the word "Admittitur," or admitted with the restriction not to be advertised, "Transeat;" sometimes they are to be delivered only to certain persons to whom the censorship has given special leave to receive them, "Erga schedam," or they are totally prohibited, "Damnatur." In Prussia, all books printed out of Germany, in the German language, must be laid before the College of Upper Censorship (Ober Censur Collegium), before the sale of them is allowed.

We will now proceed to exhibit the progress of the book-trade of Germany during the last few years, in a series of Tables, which leave scarcely any point of information to be desired, and which afford a very complete view both of the progress of literary production and of the activity of the publishers in different parts of Germany. These statements are drawn in general from the publications emanating from Leipzig, which will in each case be referred to; and as almost every publisher and bookseller of any consideration in Germany is in correspondence with that town, and has an agent there, the information may be considered as complete and trustworthy.

The number of sellers of books, prints, and music, in Germany and the adjacent countries (Switzerland, &c.) *in connexion with Leipzig*, is stated to have been—

In 1778	282
1795	332
1822	566

According to the Directories of Müller and Schulz,* the number in each year, from 1830 to 1839 was as follows:—

In 1831	830	In 1836	1,210
1832	985	1837	1,318
1833	1,010	1838	1,330†
1834	1,048	1839	1,381
1835	1,085		

* "Verzeichniss der Buch-kunst-und-Musikalienhandlungen nebst Angabe der Commissionaire in Leipzig, Berlin, Augsburg, Frankfurt, Nuremberg, Stuttgart, und Wien" (Catalogue of book-print and music sellers, with the names of their agents in Leipzig, Berlin, Augsburg, Frankfurt, Nuremberg, Stuttgart, and Vienna.) Leipzig, Immanuel Müller, 1840." (Published since 1817.) And "Allgemeines Adressbuch für den Deutschen Buchhandel, den Musikalien-kunst-und Landkarten Handel, und verwandte Geschäftszweige. (General Directory of the German book-trade, of the music, print, and map-trades, and of the branches connected therewith.) Edited by Otto Augustus Schulz, Leipzig, Schulz and Thomas, 1840."

† According to Schulz, the number in 1838 was only 1,298.

From this statement it appears that the number of booksellers in connection with Leipzig has increased 66 per cent., or two thirds, since 1831, and 144 per cent., or nearly one and a half times, since 1822.

The number in each of the principal towns in Germany, in 1839, was as follows:—

Leipzig	116	Prague	18
Berlin	108*	Halle	16
Vienna	49	Gotha	16
Frankfort-on-Maine	37	Brunswick	13
Stuttgardt	35†	Magdeburg	12
Nuremberg	28	Mayence	11
Dresden	27	Heidelberg	10
Breslau	23	Carlsruhe	10
Munich	20	Munster	9
Hamburg	20	Darmstadt	8
Cologne	19	Mannheim	7
Augsburg	18	&c. &c. &c.	

Thus Leipzig, with a population of 48,000, and Berlin, with a population of 20,000, appear to have each twice as many booksellers as Vienna, with a population of 340,000, and four times as many as Dresden, which has a population of 66,000; but, owing to various circumstances, these numbers may possibly not represent the total number of booksellers in each place.

There were in Germany, in 1839,—

212	Printers.
28	Letter-founders, and Stereotype Establishments.
92	Lithographers.
78	Map-sellers.
272	Print-sellers.
230	Music-sellers.
206	Second-hand Booksellers.
116	Paper Manufacturers (including Paper Mills).
243	Circulating Libraries and Reading-rooms.

The total number of booksellers in Germany, exclusive of sellers of prints and music, at the end of the year 1836, was 941; the number of towns in which they resided was 300. The following is a list of the number in each country of the German Confederation at that period:—

	Number of Booksellers.	Number of the Towns in which they live.
1 Austria (exclusive of her Italian dominions)	95	32
2 Prussia	323	110
3 Bavaria	102	34
4 Saxony	142	19
5 Hanover	17	11
6 Württemberg	50	15
7 Baden	31	10

* In Berlin there were 73 booksellers, 35 printers, 34 print-sellers, 22 music-sellers, 65 lithographers, and 43 engravers and copper-plate printers; but it must be observed, that one firm often unites several branches.

† In Stuttgardt there were, in 1839, 28 booksellers, including two second-hand dealers; 26 printers, possessing 19 power presses, and 102 hand presses, and employing 500 assistants and workmen; 5 letter-founders; 2 stereotype-founders; 48 bookbinders, with 80 assistants; and 249 authors and men of letters, exclusive of editors of newspapers. In the whole of Württemberg there were 60 paper mills, of which 20 were for the manufacture of "machine" paper.

	Number of Booksellers,	Number of the Towns in which they live.
8 Electorate of Hesse	12	7
9 Grand Duchy of Hesse	24	6
10 Holstein	6	4
11 Luxemburg (belongs, as regards the book- trade, to France) . . . . .	..	..
12 Saxe-Weimar	14	5
13 Saxe-Meiningen-Hildburghausen	4	3
14 Saxe-Altenburg	7	3
15 Saxe-Coburg-Gotha	15	3
16 Brunswick	12	4
17 Mecklenburg-Schwerin	11	8
18 Mecklenburg-Strelitz	3	3
19 Oldenburg	1	1
20 Nassau	7	4
21 Anhalt-Dessau	6	2
22 Anhalt-Bernburg	1	1
23 Anhalt-Köthen	1	1
24 Schwarzburg-Sondershausen	3	2
25 Schwarzburg-Rudolstadt	2	1
26 Hohenzollern-Hechingen	1	1
27 Hohenzollern-Sigmaringen . . . . .	..	..
28 Lichtenstein . . . . .	..	..
29 Reuss, elder branch	1	1
30 Reuss, younger branch	3	2
31 Lippe-Detmold	1	1
32 Schaumburg-Lippe . . . . .	..	..
33 Waldeck	2	2
34 Hesse-Homburg . . . . .	..	..
35 Lübeck	2	1
36 Frankfort-on-Maine	24	1
37 Bremen	5	1
38 Hamburg	13	1
Total	<u>941</u>	<u>300</u>

The number of new publications which appeared in each of the principal of those countries, and the proportion which they bore to the number of booksellers, will be seen in the following Table, relating to the year 1837 :—*

	New Publications in 1837.	Average Number of Publications in 1837, to each Bookseller, in 1836.
Prussia	2169	6·7
Saxony	1342	9·4
Bavaria	889	8·7
Württemberg	609	12·
Austria	491	5·1
Baden	263	8·5
The four Duchies of Saxony	309	7·5
The two States of Hesse	263	7·3
Hanover	177	10·4
Hamburg	185	14·2
Frankfort-on-Maine	128	5·3
Bremen	33	6·6
Lübeck	7	3·5
Holstein	68	11·3
Oldenburg	65	21·6
Mecklenburg	46	3·3

* Taken from the *Boersenblatt*, 23rd August 1839.

The number of German publishers, according to the Fair Catalogue of 1836, was 530; in the preceding year it was 496. The following is a list of the principal publishers, with their address, and the number of new publications which they sent to Leipzig in 1836.*

	New Publications.
Schlosser, at Augsburg, with	52
Arnold, at Dresden	49
Manz, at Regensburg and Landshut	47†
Brockhaus, Leipzig	43
Reimer, Berlin	43
Cotta, Stuttgart	42
Basse, Quedlinburg	40
Metzler, Stuttgart	40
Voigt, Weimar	39
Voss, Leipzig	34
Herold, Hamburg	33
Hahn, Hanover	31
Kollmann, Leipzig	31
Barth, Leipzig	30
Dunker and Humblot, Berlin	28
Steinkopf, Stuttgart	28
Fried. Fleischer, Leipzig	27
Hinrichs, Leipzig	27
Verlags Comptoir, Grimma (Saxony)	27
Baumgärtner, Leipzig	24
Campe, Nuremberg	24
Riegel and Wiessner, Nuremberg	24
Heymann, Berlin	23
Kollmann, Augsburg	23
Brodhagen, Stuttgart	22
Dümmler, Berlin	22
Hofmann and Campe, Hamburg	22
Rawsche Buchhandlung, Nuremberg	22
Sauerländer, Frankfort-on-Maine	22
Asher, Berlin	21
Franz, Munich	21
Halberger, Stuttgart	21
Fleischmann, Munich	20
Hermann and Langbein, Leipzig	20
Reiger and Co., Stuttgart	20
Leske, Darmstadt	20

The following are the principal booksellers at Leipzig who acted, in 1839, as agents for German and foreign booksellers:—

	Houses. (Firms.)		Houses. (Firms.)
Anstalt für Kunst und Literatur†	21	Fried. Fleischer	68
Arnold	7	Fort	14
Barth	66	Friese	20
Böhme	7	Frohberger	13
Böenberg	6	Gebhardt and Reiland	5
Brockhaus	43	Wm. Härtel	8
Central Comptoir	8	Hartknoch	4
Cnobloch	11	Herbig	53
Dycksche Buchhandlung	40	Hermann	68
Eisenach	10	Hinrichsche Buchhandlung	3
Engelmann	30	Hofmeister	16
Fischer and Fuchs	9	Kayser	11

* Taken from the Boersenblatt, 15th April 1836.

† Chiefly Catholic works.

‡ Institution for Art and Literature.

	Houses. (Firms.)		Houses. (Firms.)
Kirchner and Schwetschke	10	Schmidt	13
Kirtner	12	Schubert	13
Köhler	59	Schumann	3
Kollmann	34	Steinacker	62
Lauffer	5	Delvecchio	19
Leich	27	Vogel	20
Liebeskind	34	Volckmar	53
Magazin für Industrie	7	Voss	7
Meissner	16	Weber	7
Michelsen	28	Weidmannsche Buchhandlung .	2
Mittler	29	Weigel	7
Müller	34	Weygaudische Buchhandlung .	17
Nauck	4	Wienbruck	35
Peters	3	G. Wigand	11
Polet	12	Otto Wigand	4
Reclam, sen.	6	Weittig	10
Reinsche Buchhandlung	45		

Besides these, there were 21 others of less importance, making, in all, 78 houses who acted as agents, at Leipzig, for the German and foreign book-trade.*

The extent of the book-trade of Southern Germany and of Berlin is in some measure shewn by the following amount of the number of booksellers who employ agents at the latter place, and at Augsburg, Frankfort-on-Maine, Nuremberg, Stuttgart, and Vienna, as well as at Leipzig:—

96	booksellers have an agent in Augsburg.
363	„ „ „ „ Frankfort.
219	„ „ „ „ Nuremberg.
318	„ „ „ „ Stuttgart.
129	„ „ „ „ Vienna.
77	„ „ „ „ Berlin.

The number of separate firms at each place acting as agents is not exhibited.

As it has been already stated, that all the respectable booksellers of Germany have an agent at Leipzig—and it may be supposed that, in literature as in commerce, the supply will keep pace with the demand—the following alphabetical list of towns, with the number of booksellers in each having a correspondent at Leipzig, will afford some indication of the activity of the book-trade, and of the spirit for literary pursuits which prevails in each. The population of each, in round numbers, is added in order to render the comparison more just, and notice is taken of any public establishment for education existing in the several towns, which will considerably increase the value and interest of the Table. With booksellers are included all sellers of maps, prints, and music, together with printers, lithographers, and every publisher of political and literary papers:—

* Taken from the Allgemeine Adressbuch (General Directory), by Schulz.

Alphabetical List of Towns, with the Number of Booksellers in each, connected with Leipzig, in 1839.

TOWNS.	Population.	Educational Establishments.	Book-sellers.
GERMANY.			
Aix-la-Chapelle (Prussia)	38,000	Catholic College	7
Adorf (Saxony).	2,500	. . . . .	2
Altenburg	12,000	College*	6
Altona (Holstein).	26,000	College	3
Amberg (Bavaria).	5,000	College, and Seminary for Priests.	3
Anclam (Prussia)	5,000	. . . . .	1
Annaberg (Saxony)	6,000	Lyceum	1
Ansbach (Bavaria)	14,000	College	2
Arnsberg (Prussia)	4,000	Seminary for Schoolmasters .	1
Arnstadt (Schwarzburg Son- derhausen).	5,000	College, Seminary for School- masters.	2
Arolsen (Waldeck).	2,000	. . . . .	1
Aschaffenburg (Bavaria)	5,000	College, Lyceum, and Catholic Theological Seminary.	1
Aschersleben (Prussia)	10,000	College	2
Augsburg (Bavaria)	40,000	College, Lyceum, Catholic Se- minary, Academy of Arts.	18
Baden (Baden)	4,500	College	1
Baireuth (Bavaria)	13,000	College, Forest School† . . .	4
Bamberg (Bavaria)	20,000	College, Forest School, Ly- ceum, Seminary for Priests, Seminary for Schoolmasters, &c. &c.	5
Barmen (Prussia)	26,000	. . . . .	4
Bautzen (Saxony)	9,000	College, Seminary for Catholic Schoolmasters, and for Pro- testant Schoolmasters.	3
Bergen, Isle of Rugen (Prussia)	2,700	. . . . .	1
Berlin	270,000	University, Colleges, Academy of Arts, Seminaries, &c.	108
Bernburg (Bernburg)	8,000	College, Seminary	1
Biberach (Württemberg)	5,000	. . . . .	1
Bielefeld (Prussia)	5,600	College	2
Blankenheim (Saxe Weimar)	1,300	. . . . .	1
Blaubeuren (Württemberg)	1,900	Theological Seminary for Pro- testants.	1
Boitzenburg (Mecklenburg Schwerin).	3,100	. . . . .	1
Bonn (Prussia)	13,000	University, College, &c. . . .	10
Botzen (Austrian Tyrol)	8,100	College	1
Brandenburg (Prussia)	15,600	College	2
Braunsberg (Prussia)	8,900	Catholic College, Seminary for Priests.	1
Brunswick (Brunswick)	37,000	College, Seminary for School- masters, &c.	13
Bregenz (Austrian Tyrol)	2,300	. . . . .	1
Bremen (Free Town)	46,000	College, Seminary for School- masters, School for Naviga- tion and Commerce.	4

* College is expressed in German by the word "Gymnasium," meaning a public school, where Latin, Greek, French, English, Mathematics, Geography, History, &c., are taught.

† Forstamt.

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Breslau (Prussia)	92,000	University, Colleges, Seminaries, &c.	23
Brieg (Prussia)	11,000	College	2
Bromberg (Prussia)	7,000	College, Seminary	3
Brunn (Moravia)	33,000	College	3
Buntzlau Prussia)	4,600	Seminary for Schoolmasters .	2
Burg (Prussia)	14,000	. . . . .	1
Calüa (Saxe Altenberg) . . .	2,100	. . . . .	1
Carlsbad (Bohemia)	3,000	. . . . .	1
Carlsruhe (Baden)	22,000	Lyceum, Seminary for Schoolmasters.	10
Cassel (Electorate of Hesse) .	30,000	College, Seminary, &c. . . .	6
Celle (Hanover)	11,000	College	1
Chemnitz (Saxony)	23,000	College	5
Clausenburg (Austria) . . .	20,000	3 Colleges (1 United, 1 Reformed, and 1 Catholic), Lyceum.	1
Clausthal (Hanover)	9,000	College, Forest School . . .	1
Cleve (Prussia)	8,000	College	2
Coblentz (Prussia)	15,000	College, Catholic Seminary .	3
Coburg (Saxe-Coburg)	9,000	College, Seminary for Schoolmasters.	4
Colberg (Prussia)	5,600	. . . . .	1
Cologne (Prussia)	70,000	2 Colleges, Seminary for Priests, &c.	19
Constance (Baden)	5,600	Lyceum	1
Coesfeld (Prussia)	3,200	College	1
Coeslin (Prussia)	7,000	College, Seminary for Schoolmasters.	1
Coethen (Anhalt Coethen) . .	6,000	College, Seminary for Schoolmasters.	1
Cottbus (Prussia)	8,000	College	1
Crefeld (Prussia)	19,000	College	2
Custrin (Prussia)	5,400	College	1
Czernowitz (Galicia)	8,000	College, &c.	1
Dantzic (Prussia)	70,000	College, School of Navigation, &c.	5
Darmstadt (Hesse Darmstadt)	26,000	College, Military School . .	8
Dessau (Anhalt Dessau) . . .	11,000	College, Seminary for Schoolmasters.	4
Deutscherone (Prussia) . . .	3,000	. . . . .	1
Dillingen (Bavaria)	3,000	College, Lyceum	1
Dinkelsbühl (Bavaria)	5,000	. . . . .	1
Doebeln (Saxony)	6,000	. . . . .	1
Dortmund (Prussia)	6,000	College	2
Dresden (Saxony)	66,000	College, Seminary for Schoolmasters, &c.	27
Duisburg (Prussia)	6,000	College	1
Düren (Prussia)	6,600	College	1
Düsseldorf (Prussia)	30,000	College, Seminary for Schoolmasters, Academy of Painting, &c.	8
Ebnat (Bavaria)	700	. . . . .	1
Eger (Bohemia)	6,000	College	1
Ehingen (Württemberg) . . .	3,000	College	1
Elbenstock (Saxony)	4,000	. . . . .	1
Eichstadt (Bavaria)	7,000	College, Seminary for Priests.	2

TOWNS.	Population.	Educational Establishments.	Book-sellers
Eisenach (Weimar) . . .	9,000	College, Seminary for Schoolmasters.	1
Eisenberg (Altenberg) . .	4,000	. . . . .	1
Eisleben (Prussia) . . .	8,000	College	1
Elberfeld (Prussia) . . .	30,000	College, &c.	7
Elbing (Prussia)	24,000	College	4
Ellwangen (Württemberg). .	3,000	College	2
Emden (Hanover)	12,000	College, School for Navigation	1
Emmerich (Prussia) . . .	5,000	Catholic College	2
Ems (Nassau)	1,200	. . . . .	1
Erfurt (Prussia)	30,000	College, Seminary for Schoolmasters, Academy, &c.	8
Erlangen (Bavaria) . . .	9,000	University, Academy, College, &c.	7
Essen (Prussia)	5,500	College	1
Esslingen (Württemberg). .	6,000	Pædagogium, Seminary for Schoolmasters.	1
Eutin (Oldenburg)	2,600	Latin School	1
Flensburg (Denmark). . .	16,000	College, School for Navigation.	1
Frankfort-on-Maine (Free Town).	50,000	College, &c.	37
Frankfurt-on-Oder (Prussia).	23,000	College	5
Freiberg (Saxony). . . .	12,000	College, Mining Academy, Seminary for Schoolmasters.	2
Freiburg (Baden)	14,000	University, College, &c. . .	6
Friesing (Bavaria). . . .	4,000	Seminary for Priests, Seminary for Schoolmasters.	1
Friedberg (Hesse Darmstadt)	2,600	College, Seminary for Schoolmasters.	1
Friedland (Mecklenburg Str.-nitz).	4,400	College	1
Fulda (Electorate of Hesse) .	10,000	College, Lyceum, Seminary for Priests, Seminary for Schoolmasters.	1
Fürstenwalde (Prussia) . .	4,000	. . . . .	1
Furth (Bavaria)	13,000	Jewish College, &c. . . .	1
Gardelegen (Prussia) . . .	5,000	Seminary for Schoolmasters .	1
Gera (Reuss)	11,000	College, Seminary for Schoolmasters.	3
Giessen (Hesse Darmstadt) .	8,000	University, College, Seminary for Schoolmasters.	4
Glauchau (Saxony)	5,000	. . . . .	2
Glogau (Prussia)	12,000	College	4
Gmünd, Schwäbisch (Württemberg).	6,000	. . . . .	1
Gnesen (Prussia)	6,000	Catholic Seminary for Priests	1
Goch (Prussia).	3,000	. . . . .	1
Goeppingen (Württemberg) .	5,000	. . . . .	1
Goerlitz (Prussia). . . .	12,000	College, &c.	3
Goslar (Hanover)	6,000	. . . . .	1
Gotha (Coburg)	13,000	College, Seminary for Schoolmasters, &c.	9
Göttingen (Hanover) . . .	11,000	University, College, &c. . .	6
Gratz (Styria)	50,000	University, College, Seminary for Priests, &c.	7
Graussec (Prussia). . . .	2,000	. . . . .	1

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Greifswald (Prussia) . . .	10,000	University, College, Seminary for Schoolmasters.	3
Greiz (Greiz)	7,000	College, Seminary for Priests, Seminary for Schoolmasters.	1
Grimma (Saxony).	4,000	College, Seminary for Schoolmasters.	2
Grossenhayn (Saxony) . . .	6,000	. . . . .	1
Guben (Prussia)	9,000	College	1
Gummersbach (Prussia) . . .	6,000	. . . . .	1
Güns (Hungary)	6,000	College, Academy	1
Güstrow (Mecklenburg Schwe- rin).	8,000	. . . . .	1
Gütersloh (Prussia)	2,600	. . . . .	1
Halberstadt (Prussia) . . .	17,000	College, Seminary for School- masters.	2
Halle (Prussia)	25,000	University, College, &c. . . .	16
Halle, Schwäbisch (Württem- berg).	6,500	Latin School, Seminary for Schoolmasters.	2
Hamburg (Free Town) . . .	125,000	College, School for Navigation, &c.	20
Hamm (Prussia)	6,000	College	3
Hanau (Electorate of Hesse). .	14,000	College, Academy, &c. . . .	4
Hanover (Hanover)	30,000	College, Seminary for School- masters, &c.	9
Hechingen (Hohenzollern- Hechingen).	3,000	College	1
Heide (Holstein)	5,000	. . . . .	1
Heidelberg (Baden)	13,000	University, College, Seminary for Schoolmasters, &c.	10
Heilbronn (Württemberg) . .	8,000	College	2
Heiligenstadt (Prussia) . . .	4,300	Catholic College	1
Helmstadt (Brunswick) . . .	6,000	College	1
Hertfort (Prussia)	5,000	College, Jewish School . . .	1
Hermannstadt (Austria) . . .	18,000	Catholic College, Lutheran College.	2
Hersfeld (Electorate of Hesse)	6,000	College	2
Hildburghausen (Saxe Mein- ingen Hildburghausen). . .	4,000	College, Seminary for School- masters.	2
Hildesheim (Hanover)	15,000	College, Seminary for Priests	2
Hirschberg (Prussia)	6,600	College	3
Hof (Bavaria)	6,000	College	1
Holzminnen (Brunswick). . .	3,000	College	2
Jena (Saxe Weimar)	6,000	University, &c.	9
Ilmenau (Saxe Weimar) . . .	2,200	. . . . .	1
Innsbruck (Austrian Tyrol) . .	11,000	University, Lyceum, Seminary	4
Iusterburg (Prussia)	8,000	College, Seminary for School- masters.	1
Iserlohn (Prussia).	8,000	. . . . .	1
Itzehoe (Holstein)	5,500	. . . . .	1
Jüterbogk (Prussia)	4,600	. . . . .	1
Kaiserslautern (Bavaria). . .	4,000	Seminary for Schoolmasters .	1
Kandern (Baden)	1,300	Forest School	1
Kaschau (Hungary)	14,000	Catholic Academy, Seminary for Priests.	1
Kempten (Bavaria)	4,000	College, &c.	2
Kiel (Holstein).	12,000	University College.	2
Kittlitz (Prussia)	600	. . . . .	1

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Kitzingen (Bavaria) . . .	6,000	Latin School	1
Klagenfurt (Carinthia) . .	10,000	Theological Seminary, College, Lyceum.	1
Königsberg (Prussia). . .	70,000	University, Seminary, &c. . .	7
Königsberg-Neumark (Prussia)	5,400	College	1
Kreuznach (Prussia) . . .	8,000	College	2
Krotoschin (Prussia) . . .	6,300	. . . . .	1
Landsberg - on - the - Warthe (Prussia).	10,000	. . . . .	2
Landshut (Bavaria) . . .	9,000	College, Catholic Seminary . .	3
Laybach (Carniola) . . .	12,000	College, Seminary for Priests, Lyceum.	3
Leipzig (Saxony)	48,000	University, &c.	116
Lemberg (Galicia)	55,000	University, College, Academy, 2 Seminaries, &c.	4
Lemgo (Lippe Detmold) . .	3,800	College	1
Liegnitz (Prussia). . . .	10,000	College, Academy	3
Limburg on the Lahn (Nassau)	3,000	Catholic Seminary. . . .	1
Lindau (Bavaria)	3,200	. . . . .	2
Lingen (Hanover)	2,600	College	1
Linz (Austria)	24,000	College, Lyceum, Catholic Seminary.	3
Lippstadt (Prussia) . . .	3,500	. . . . .	1
Lissa (Prussia)	8,000	College, Seminary for Schoolmasters.	1
Löbau (Saxony)	2,500	. . . . .	1
Lörrach (Baden)	2,400	Pædagogium	1
Loewenberg (Prussia) . . .	4,000	. . . . .	1
Lübben (Prussia)	4,000	Lyceum	1
Lübeck (Free Town) . . .	27,000	College, Seminary for Schoolmasters.	2
Luckau (Prussia)	3,000	. . . . .	1
Ludwigsburg (Württemberg).	7,000	Military Academy, Lyceum .	1
Ludwigslust (Mecklenburg Schwerin).	5,000	Seminary for Schoolmasters .	1
Lüneburg (Hanover) . . .	12,000	College, Academy	1
Lyk (Prussia)	3,200	College, Polish Seminary for Schoolmasters.	1
Magdeburg (Prussia) . . .	48,000	2 Colleges, Seminary for Schoolmasters.	12
Mayence (Hesse Darmstadt).	35,000	College, Theological Seminary, &c.	11
Mannheim (Baden)	22,000	College, Jewish School, &c. .	7
Marburg (Electorate of Hesse)	8,000	University, College, Seminary for Schoolmasters, &c.	2
Marienburg (Prussia) . . .	6,000	College, Seminary for Schoolmasters.	1
Marienwerder (Prussia) . .	5,000	College	1
Mecklenburg (Mecklenburg Schwerin).	650	. . . . .	1
Meiningen (Saxe Meiningen Hildburghausen).	5,000	College, Seminary for Schoolmasters, &c.	1
Meissen (Saxony)	7,500	College, Lyceum, Academy for Drawing.	2
Memel (Prussia)	8,500	College	1
Merseburg (Prussia) . . .	9,000	College	3
Meurs (Prussia)	2,000	College, Seminary for Schoolmasters.	1

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Minden (Prussia)	8,500	College, Seminary for Schoolmasters.	2
Mitweida (Saxony)	5,000	. . . .	1
Mohrungen (Prussia)	2,500	. . . .	1
Mühlhausen (Prussia)	10,000	College	1
Mülheim on the Ruhr (Prussia).	6,400	. . . .	2
Munich (Bavaria)	80,000	University, College, Lyceum, &c.	20
Münden (Hanover)	6,000	Latin School	1
Münster (Prussia)	23,000	Catholic Seminary for Priests, Catholic Seminary for Schoolmasters, Jewish Seminary for Schoolmasters.	9
Naumburg (Prussia)	11,000	College	3
Neisse (Prussia)	10,000	Catholic College	1
Neubrandenburg (Mecklenburg Strelitz).	6,500	College	1
Neuburg-on-the-Danube (Bavaria).	10,000	College, Seminary.	1
Neuhaldensleben (Prussia) .	3,600	. . . .	1
Neu Ruppın (Prussia)	8,000	College	1
Neustadt-on-the-Hardt (Bavaria).	6,000	Latin School, Forest School .	1
Neustadt-on-the-Orla (Saxe-Weimar.	3,500	Mining School	1
Neustrelitz (Mecklenburg Strelitz).	6,000	College, Seminary for Schoolmasters.	1
Neuwied (Prussia)	5,500	College, Seminary for Schoolmasters.	1
Nordhausen (Prussia)	10,000	College	4
Noerdlingen (Bavaria)	5,000	Latin School	1
Nuremberg (Bavaria)	40,000	College, Seminary for Schoolmasters, &c.	28
Oedenburg (Hungary)	13,000	Catholic College, Lutheran College, Military School.	1
Offenbach (Hesse Darmstadt)	10,000	College	2
Offenburg (Baden)	4,000	College	1
Oldenburg (Oldenburg)	6,000	College, Seminary for Schoolmasters, Military School.	1
Olmütz (Moravia)	11,000	University, College, &c. . . .	1
Oppeln (Prussia)	6,500	Catholic College	1
Osnabrück (Hanover)	12,000	College, Seminary for Schoolmasters.	2
Osterode (Hanover)	5,000	. . . . .	1
Paderborn (Prussia)	8,000	College, Seminary for Priests	3
Parchim (Mecklenburg-Schwerin).	5,300	College	1
Pasewalk (Prussia)	6,000	. . . . .	1
Passau (Bavaria)	10,000	College, Seminary for Priests	3
Perleberg (Prussia)	3,500	. . . . .	1
Pesth (Hungary)	80,000	University, College, Theological Seminary, &c.	6
Pforzheim (Baden)	6,300	Pædagogium	1
Pilsen (Bohemia)	8,800	College	1
Pirna (Saxony)	5,500	. . . . .	1
Plauen (Saxony)	8,600	College, Seminary for Schoolmasters.	2

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Polten, St. (Austria) . . .	4,400	Theological Seminary. . . .	1
Posen (Prussia)	30,000	College, Seminary for Priests, Seminary for Schoolmasters.	5
Pössneck (Saxe Meiningen) .	3,200	. . . . .	1
Potsdam (Prussia)	31,000	College, Seminary for School- masters, Military School, &c	4
Prague (Bohemia)	120,000	University, 3 Colleges, &c. .	18
Prenzlau (Prussia)	10,000	College	2
Presburg (Hungary)	38,000	College, Academy, Semi- nary, &c.	5
Pyrmont (Waldeck)	2,500	. . . . .	1
Quedlinburg (Prussia) . . .	12,000	College	4
Raab (Hungary)	18,000	Theological Seminary, College, Academy.	1
Rastenburg (Prussia). . . .	3,700	College	1
Rathenow (Prussia)	5,000	College	1
Ratibor (Prussia)	5,000	College	1
Ravensburg (Württemberg) .	3,700	. . . . .	1
Rawicz (Prussia)	8,000	College	1
Regensburg (Bavaria) . . .	28,000	Theological Seminary, Lyce- um, &c.	5
Reichenbach (Saxony) . . .	4,500	. . . . .	1
Reichenberg (Bohemia) . . .	12,000	School for Drawing	1
Reutlingen (Württemberg) .	10,000	Lyceum	6
Ried-above-Enns (Austria) .	2,600	. . . . .	1
Rinteln (Electorate of Hesse)	3,000	College	1
Ronneburg (Saxe-Altenberg)	4,700	Lyceum	1
Rostock (Mecklenburg Schwe- rin).	18,000	University, College, Semi- nary, &c.	4
Rothenburg - on - the - Taube (Bavaria).	8,000	College	1
Rottenburg - on - the - Neckar (Württemberg).	5,500	Seminary for Priests	2
Rotweil (Württemberg) . . .	3,200	College	1
Rudolstadt (Schwarzburg Ru- dolstadt).	5,000	College, Seminary for School- masters.	3
Saalfeld (Saxe Meiningen) .	4,000	Lyceum	1
Saarbrück (Prussia)	7,000	College	1
Saaz (Bohemia)	5,000	College	1
Sagan (Prussia)	5,600	. . . . .	1
Salzburg (Austria)	11,000	Theological Seminary, Aca- demy, Lyceum, &c.	4
Salzwedel (Prussia)	6,600	College	1
Sangerhausen (Prussia) . . .	1,500	College	2
Schleiz (Reuss-Schleiz) . . .	5,000	College, Seminary for School- masters.	1
Sleswick (Denmark)	11,000	. . . . .	3
Schleusingen (Prussia) . . .	2,500	College	1
Schmalkalden (Electorate of Hesse).	5,000	College	1
Schneeberg (Saxony)	5,800	Lyceum	1
Schnepfenthal (Saxe Coburg)	. . .	Pædagogium	1
Schwedt (Prussia).	4,500	. . . . .	1
Schweidnitz (Prussia) . . .	10,000	College	2
Schweinfurt (Bavaria) . . .	7,000	College, School for Trade and Commerce.	1
Schwelm (Prussia)	3,000	College	3

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Schwerin (Mecklenburg Schwerin).	13,000	College, Military School, Seminary for Schoolmasters, &c.	2
Siegen (Prussia)	5,000	College	1
Solingen (Prussia)	4,500	. . . . .	2
Sondershausen (Schwarzburg Sondershausen).	4,000	College	1
Sonnenberg (Saxe Meiningen)	3,000	. . . . .	1
Soest (Prussia)	7,700	College, Seminary for Schoolmasters.	2
Sorau (Prussia)	4,500	College	2
Spire (Bavaria)	8,000	College, Lyceum	2
Stanislawar (Galicia)	8,500	College	1
Stargard (Prussia)	10,000	College	1
Stendal (Prussia)	5,600	College	1
Stettin (Prussia)	30,000	2 Colleges	6
Stolpe (Prussia)	6,500	. . . . .	2
Stralsund (Prussia)	16,000	College, Seminary for Schoolmasters.	2
Straubing (Bavaria)	8,000	College, Seminary for Schoolmasters.	1
Stuttgart (Württemberg) . .	35,000	College, Academy, &c. . . .	35
Suhl (Prussia)	6,500	. . . . .	1
Salzbach (Bavaria)	4,000	Latin School	1
Tarnow (Galicia)	4,800	College, Jewish School . . .	1
Thorn (Prussia)	9,000	College	1
Tilsit (Prussia)	12,000	College	1
Tirnavu (Hungary)	6,800	College, Seminary for Catholic Priests.	1
Torgau (Prussia)	6,000	College	2
Treves (Prussia)	15,000	College, Catholic Seminary for Priests, Catholic Seminary for Schoolmasters.	6
Trieste (Illyria)	50,000	College, School for Navigation.	2
Tübingen (Württemberg) . .	8,000	University	5
Ulm (Württemberg)	15,000	College	6
Vacha (Saxe Weimar)	1,800	. . . . .	1
Varel (Oldenburg)	3,000	. . . . .	1
Weilburg (Nassau)	2,000	College	1
Weimar (Saxe-Weimar)	11,000	College, Seminary for Schoolmasters.	8
Weissenfels (Prussia)	5,600	Seminary for Schoolmasters .	2
Weissensee (Prussia)	2,000	. . . . .	1
Wels (Austria)	4,300	. . . . .	1
Wesel (Prussia)	12,000	College, Seminary for Schoolmasters.	3
Wetzlar (Prussia)	4,500	College	1
Wien (Vienna), (Austria) . .	340,000	University, 3 Colleges, Academy, Seminaries, &c.	49
Wiesbaden (Nassau)	9,000	Pædagogium, School for Drawing and Architecture.	5
Wiesenstein (Württemberg) . .	1,400	. . . . .	1
Wismar (Mecklenburg Schwerin).	10,000	College	1
Wittenberg (Prussia)	8,000	College, Theological Seminary	1
Wolfenbüttel (Brunswick) . .	8,500	Seminary for Priests, Seminary for Schoolmasters.	2

TOWNS.	Population.	Educational Establishments.	Book-sellers.
Worms (Hesse Darmstadt) .	8,000	College	1
Wriezen-on-the-Oder (Prussia)	5,500	. . . . .	1
Wreusiedel (Bavaria) . . .	3,000	. . . . .	1
Würzburg (Bavaria) . . .	23,500	University, College, Seminary for Priests, Seminary for Schoolmasters, &c.	4
Zeitz (Prussia)	7,500	College, Seminary for School- masters.	2
Zerbst (Anhalt Dessau) . .	8,000	College	1
Zittau (Saxony)	9,000	College, Seminary for School- masters, School for Drawing.	3
Znaym (Moravia)	5,400	College	2
Zweibrücken (Bavaria) . .	7,000	College	2
Zwickau (Saxony)	6,000	College	6
Total of Germany, 337 towns	. .	. . . . .	1233
SWITZERLAND.			
Aarau	4,000	College	3
Baden	2,000	. . . . .	2
Basle	16,000	University, College, Seminary for Schoolmasters.	7
Berne	20,000	Academy, Theological Semi- nary.	8
Coire	4,000	Catholic Seminary	1
Frauenfeld	2,000	. . . . .	1
Gall, St.	10,000	College, Seminary, Lyceum .	2
Lucerne	7,000	College, Lyceum, Seminary for Priests	4
Schaffhausen	7,000	College	2
Solothurn	4,000	College, Lyceum, Seminary for Priests, Seminary for School- masters.	3
Thun	5,000	Military School	1
Trogen	2,500	School of Agriculture . . .	1
Winterthur	4,000	College	2
Zug	3,000	College	1
Zürich	13,000	University, College, &c. . .	11
Total of Switzerland, 15 towns	..	. . . . .	49

FOREIGN COUNTRIES.

Booksellers.	Booksellers.
Strasburg 5	Lund (Sweden) 1
Paris 17	St. Petersburg 10
Milan 3	Warsaw 7
Brussels 4	Dorpat (Liefland) 2
Antwerp 1	Riga 3
Amsterdam 9	Mittau (Courland) 2
Rotterdam 3	Reval (Esthland) 2
Hague 4	Wilna 2
Utrecht 3	
Leyden 2	Total of foreign countries, 21
Copenhagen 13	towns } 99
Stockholm 5	
Upsal 1	

Total number in connexion with Leipzig, 373 towns . . 1,381

That part of Switzerland in which the German language is spoken is, in its literature, wholly German, and intimately connected with Germany. The same may be said of Liefland, Courland, and Esthland, under the Russian dominion, and of Strasburg, which now belongs to France, although its affinity to Germany, as regards both its language and literature, has considerably decreased since its connexion with that country.

All the 10 booksellers at St. Petersburg, in connexion with Leipzig, are German firms; at Paris, 8; at Warsaw, 5; and at many of the other places a considerable proportion of the whole number are German.

Having thus completed a view of the places in connexion with Leipzig, and of the parties by whom the book-trade of Germany is carried on, we shall proceed to shew the number of new publications which have appeared during the last 25 years, and the nature of those works during the latter part of that period.

The first Table is a statement, which of course cannot lay claim to strict accuracy, but may be considered as the best possible approximation to an account of all works, including new editions, which have been published in Germany and in the adjacent countries, by publishers in connexion with Leipzig, during each year from 1814 to 1839. The numbers from 1814 to 1831 are taken from "Menzel's Literaturblatt," a supplement to the "Morgenblatt," printed for Cotta, at Stuttgart. Menzel asserts that he has carefully made his abstracts from the Leipzig fair catalogues. His list continues to the year 1833; but as it does not agree with two statements published by Wigand* and Otto Aug. Schulz,† which appear to be more correct, and the subsequent years of which agree better with the number which we have extracted for the year 1839, we have substituted their statement, and placed Menzel's figures in brackets at their side. Wigand's list is brought down to 1837; the figures in brackets by the sides, from 1833 to that year, are extracted from the Leipzig "Börsenblatt für den Deutschen Buchhandel—Chronik des Buchhandels." (Exchange Gazette for the German Book-trade—Chronicle of the Book-trade.)‡ The statement for the year 1838 is taken from this latter source; and that for 1839, being only given in round numbers in that publication, has been specially prepared from Hinrich's catalogue.

* "Buchhandel Zusammen gestellt und mitgetheilt." By Otto Wigand. Börsenblatt. 23rd August 1839.

† In Schiebe's Universal Lexicon, under the title, "Buchhandel," p. 255.

‡ Of 24th April 1835, 11th March 1836, 23rd August 1839, and 14th April 1840.

*Number of New Publications and New Editions noticed in the Leipzig
Fair Catalogues from 1814 to 1839.*

Years.	Number.	Years.	Number.
1814	2,529	1828	5,654
1815	2,750	1829	5,314
1816	3,197	1830	5,926
1817	3,532	1831	6,389 (5,658)
1818	3,781	1832	6,929 (6,275)
1819	3,916	1833	6,310 (5,888)
1820	3,958	1834	7,202 (6,074)
1821	3,997	1835	7,146 (5,903)
1822	4,283	1836	7,529 (6,453)
1823	4,309	1837	7,891 (7,120)
1824	4,511	1838	8,662
1825	4,836	1839	9,738 *
1826	4,704		
1827	5,108		
		Total	140,101

The progressive rate of increase will be best exhibited in the following abstract, taken chiefly in quinquennial periods:—

Annual average of 5 years, from 1814 to 1818		Increase per Cent.	
5	1819 1823 . .	4,092	29
5	1824 1828 . .	4,962	21
5	1829 1833 . .	6,013	21
6	1834 1839 . .	8,028	33

The increase of the last six, compared with the first five years, is 154 per cent.; but if the last year alone be compared with the first period, the increase is 176 per cent.; and, if compared with the first year alone, it is 285 per cent., or nearly quadruple. The average of the whole period is 5,388.

Among these numerous publications are many of an insignificant value and an ephemeral nature, such as pamphlets, journals, novels, &c.; but the subjoined Table will shew what proportion belongs to each class of literature; and an acquaintance with the contents of a large portion will afford ample ground for admiring the sound reasoning, the diligence, and perseverance in examining and sifting, the extensive knowledge, deep erudition, and productive spirit of German authors.

A similar account has already been given for a remote period,† and it may be interesting to trace the changes which have since occurred. The subjoined statement, as far as regards the five years from 1831 to 1835, is taken from an article on the book-trade, by O. A. Schulz, in Schiebe's "Universal Lexicon of Commercial Science," which contains much valuable information upon the subject. The numbers for the year 1838 are taken from the "Börsenblatt" (14th April 1840), already quoted, and those for 1839 have been abstracted from the Leipzig Fair Catalogue for that year.

The whole will afford a very fair view of the state of different branches of literature in Central Europe, since it exhibits an account of all new works, and of new editions of old works, published in Germany, Hungary, Switzerland, and the German provinces of Russia, during the principal part of the last nine years:—

* Not including 133 maps and collections of maps.

† See page 8.

DESCRIPTION OF WORKS.	1831	1832	1833	1834	1835	1838	1839
1. Scientific Theology (Wissenschaftliche Theologie).	954	1008	887	500	531	790	870
2. Sermons and Books of Devotion . . .	Included in No. 1.			464	473	590	678
3. Law-books (Jurisprudence)	243	266	216	243	239	450	343
4. State affairs and Politics (Staats-und Cameral Wissenschaften).	783	783	572	666	563	710	701
5. Medicine, Surgery, and Midwifery . . .	378	342	369	374	365	481	508
6. Cholera and Influenza	195	203	35	Included in No. 5.			
7. Homœopathic (and treatment by spring water, "Wassercur," in 1839).	Included in No. 5.			69	45	29	58
8. Veterinary Science	27	36	27	36	32	38	45
9. Chemistry and Pharmacy	63	86	72	68	72	91	8
10. Philosophy	149	203	212	230	248	310	346
11. Education and School-books (Pædagogik)	365	441	396	185	225	209	300
12. Juvenile Books	Included in No. 11.			275	252	275	267
13. Philology	464	477	455	509	495	652	769
14. History	567	576	563	491	486	389	645
15. Biography	Included in No. 14.			171	153	155	231
16. Mythology and Antiquity	68	68	50	70	81	94	96
17. Geography, Travels, and Statistics . .	209	239	284	230	333	396	429
18. Natural History and Physical Science .	313	284	279	342	365	420	452
19. Mathematics	125	162	153	180	194	224	241
20. Military Works	134	135	113	162	159	151	209
21. Commerce, Mining, Currency, &c. . .	79	108	111	144	113	154	194
22. Handicraft, Manufactures (Technologie)	166	216	234	284	250	307	333
23. Agriculture and Rural Economy . . .	234	225	189	194	203	268	261
24. Forest and Hunting Matters	Included in No. 23.			45	36	36	57
25. Arts and Belles Lettres	443	594	540	572	545	660	784
26. Music	Included in No. 25.			77	70	80	97
27. Novels and Romances	227	261	257	302	342	350	352
28. Theatre	68	72	104	144	117	174	197
29. Miscellaneous	135	144	117	162	149	174	187
	6389	6929	6312	7202	7146	662	9738

The first result of interest to be drawn from this Table is the comparative number of works published in each branch of literature, and this is shewn in the following abstract of the per-centage proportion in which each branch contributes to swell the catalogue:—

	Per Cent.		Per Cent.
1. Scientific Theology	9	16. Agriculture and Rural Economy	2.7
2. Arts and Belles Lettres	8	17. Mathematics	2.5
3. Philology	7.9	18. Biography	2.3
4. State Affairs and Politics	7.2	19. Military Works	2.1
5. Sermons and Books of Devotion	7	20. Theatrical Works	2
6. History	6.6	21. Commerce, &c.	2
7. Medicine and Surgery, &c.	5.2	22. Miscellaneous	1.9
8. Natural History and Physical Science	4.7	23. Music	1
9. Geography, Travels, and Statistics	4.4	24. Mythology and Antiquity	1
10. Novels and Romances	3.6	25. Chemistry and Pharmacy	0.9
11. Philosophy	3.6	26. Homœopathy and "Wassercur"	0.6
12. Jurisprudence	3.5	27. Forest and Hunting Matters	0.6
13. Handicraft and Manufactures	3.4	28. Veterinary Science	0.5
14. Education and School-books	3		
15. Juvenile Books	2.8		
		Total	100

Of the theological works, which include religious school-books, in 1839, 235, or 27 per cent., were Roman Catholic publications; and, of the sermons, and books of devotion, 289, or 42 per cent., were of the same class. The number of poems, included among *belles lettres*, was 251, or 2·6 per cent. of the whole number of works.

In comparing the year 1839 with 1789, the following are the prominent changes. The proportion which theological works bore to the total number, in 1789, was 17 per cent.; in 1839 it was 17 per cent. The proportion of Roman Catholic to Protestant works was 23 per cent. at the former, and 34 per cent. at the latter period. Works on jurisprudence had decreased from 7·5 to 3·5 per cent.; on medicine, &c., from 9·9 to 7·2; and it is worthy of note, that novels and theatrical works had diminished from 13 to 5·6 per cent. On the other hand, history, geography, and politics, had increased from 15 to 18·2 per cent.; natural history, agriculture, &c., from 6·2 to 8 per cent.; educational works from 3·2 to 5·8 per cent.; and poems, from 1·7 to 2·6 per cent.

The account, however, for the years 1831 to 1839, affords the means of a stricter comparison, as it is made out for the whole period on the same principle; and the actual number of books published in each branch of literature, in different years, can be compared, instead of the mere relative proportion which they bear to the whole number, as in the preceding comparison. Contrasting, therefore, the last year of the series, 1839, with the first year, 1831, it appears that there has been an increase in every branch but state affairs and medicine, which have decreased, the former 10, and the latter 1 per cent. The increase among the other branches has been as follows:—

Increase between 1831 and 1839.

	Per Cent.		Per Cent.
Theatrical Works	190	Military Works	56
Commerce, &c.	143	Novels and Romances	55
Philosophy	132	History	54
Geography, Travels, and Statistics	105	Natural History, and Physical	
Handicraft and Manufactures .	100	Sciences	47
Arts and Belles Lettres	100	Jurisprudence	41
Mathematics	92	Mythology and Antiquity	41
Veterinary Science	66	Chemistry and Pharmacy	40
Philology	65	Agriculture and Rural Economy .	36
Theology, Sermons, and Books of			
Devotion.	62	Increase of Books of all kinds .	52

It will be seen, from the above statement, that by far the greater proportion of the works published in Germany are, as far at least as regards their subjects, of a standard character; and that, with the exception of theatrical works, the increase, during the last nine years, has been greatest among works of that class. These results are creditable to the spirit and the literary taste of the people of Germany. It would be exceedingly curious to draw a similar comparison for other countries—for England, the United States, or France; particularly for the two former, where the liberty of the press is unrestrained, and where it would be highly interesting to observe the influence of great commercial activity, and political freedom, upon the mental energies and literary taste of the population.*

* An account of the book-trade in England, France, the United States, and other countries, has since been received from M. Meidinger, and will appear in a future Number.

Report upon the Working of the Registration and Marriage Acts, during the two years 1837-38 and 1838-39, in the Registration District of Manchester. By WM. JOHNS, M.D., Superintendent-Registrar.

[*Read before the Statistical Society of London, on the 18th May 1840.*]

THE township of Manchester comprises an area of probably more than 1500 statute acres, and contains a population of above 200,000 souls. Its boundaries are well defined, and its inhabitants are densely crowded. As a matter of great interest to all classes of politicians, and equally to the mercantile as to the philanthropic portions of the community, the vital statistics of every important town claims a separate notice, and the details will be considered deserving of grave attention. The working of the Registration and Marriage Acts is not only beneficial to the existing population, but, as the system is perfected, will become still more important to generations yet unborn. The advantages of such a measure, embracing the interests of the entire community, and guaranteeing equally the rights of the richest and poorest, are obvious. To point out therefore, in this place, any one benefit in particular is unnecessary; unless it be that an authentic and an unquestionable legal record of marriages, births, and deaths, certificates of which may be obtained at any time, without delay, and comparatively without expense, is absolutely indispensable in a well organized State. The present law provides for this necessity. It is surprising that England, notwithstanding the high degree of civilization which it has attained, should have been, until the year 1837, destitute of the advantages of so important an institution. That the system is perfect no one will contend. It is still in its infancy, not being quite three years old; and, notwithstanding the opposition which at first was offered by interested parties, and the prejudices of others, both which kinds of hostility have now subsided, the First Report of the Registrar-General, presented to Parliament last year, is a satisfactory indication of what may be expected, when the machinery of the system is perfected.

In directing attention to the subjoined Tables, it should be observed, that they refer exclusively to the *township* of Manchester. In the returns of the Registrar General made to Parliament, Manchester is included in a division embracing several adjoining districts; among which is the contiguous town of Salford, with 21 other townships or chapelries, covering a space of 37,797 acres, and containing a population of 236,935 persons. The area of Manchester proper is variously estimated: by one authority (the Population Returns), it is reckoned to contain 1,480 statute acres, by a second it is stated at 1,577 acres. The population in 1831 is stated to have been 142,026. The annual rate of increase from 1821 to 1831 was 3·15 per cent.; therefore, at the same rate of increase, the population in June 1838 (the mean of the period observed in the Tables) would be 173,271. But the population, if reckoned by the return of deaths, is 296,000; and if by the return of births, 212,000; the mean is 254,000, which, notwithstanding the uncertain data, will be found tolerably correct. The annual rate of mortality was 2·92 per cent. in 1837-38, a little higher than in the metropolis. The subjoined Tables embrace a period of two years,

ending 30th June, whilst those given in the Parliamentary Report exhibit only the returns of the first year.

Births.—The number of births registered during the first year was 5,458 (males 2,792, females 2,666), and during the second year 6,358 (males 3,303, females 3,055); being an increase of 900 in the second year. The proportion of males to females is as 51·6 to 48·4, giving an excess of male births 3·16, or rather more than 3½ per cent.

Plurality of Births.—During the two years there were, in 11,816 births, only 1 case of triplets, and 127 of twins, *viz.*, 60 in the first, and 67 in the second year. The twins are in the ratio of 1·07 in every 100, or nearly 10·8 in 1000. Cuvier estimated the average of twin births at 2 in 1000.

Deaths.—The registered deaths during the first year amounted to 5,611, and in the second year to 6,234, being an increase in the latter of 623. The males in the two years amounted to 6,174, the females to 5,671. The proportion of male to female deaths is as 52·1 to 47·9, being an excess of 4·24, or nearly 4½ per cent., while the excess of male over female births is 3·16 or 3½ per cent.; so that although within a given period more males than females are born, there is also within the same period a greater proportion of male deaths than of male births. In the Manchester district, the excess of male deaths above male births is 1,082 in every 1000.

Comparative Deficiency in the number of Births registered.—The average proportion of births to deaths throughout the kingdom has been estimated as 28 to 20 in 1000 of the population. The births registered in the Manchester district during the first year were to deaths as 19·45 to 20; in the second year as 20·39 to 20. Although therefore the registry of births is becoming more general, yet the births registered annually do not bear a proper proportion to the actual number of births. The registry of deaths is obligatory, but that of births is to a certain extent optional, and is consequently neglected. Until therefore the registration be made compulsory in both cases, no certain or satisfactory results with regard to the increment of the population can be obtained.

Coroners' Inquests.—The number of inquests held during two years in Manchester was 561, being in the proportion of 4·73 in every 100 deaths.

Deaths in Public Institutions.—There were 520 deaths in the infirmary during the two years; 427 in the fever wards, and 550 in the workhouse; or in the proportions respectively of 4·39, 3·60, and 4·64 per cent. In the whole number of deaths occurring in Manchester during two years, *viz.*, 11,815, there were 1,497, equal to 12·63 or 12½ in every 100 deaths, which took place in institutions supported at the public expense.

Diseases.—On comparing the diseases of the two years as given in Table V., it will be found that epidemic and contagious diseases occupy a large proportion. In 18 of the principal diseases there is a difference in the aggregates of each year. In the first year the number in proportion to the total deaths was as 78·61 to 100, and in the second year as 79·93. There is however a still greater difference in the distribution of the diseases in the two periods. Deaths from consumption were about 2 per cent. less in the second year than in the preceding.

Small-pox was slightly increased. The great and striking increment was in measles, the mortality from which was as high as 9·91 in the latter, and only 1·84 in the former year. Hooping-cough and scarlet fever were also more fatal in the second year. As these are for the most part diseases of early life, their prevalence will account for the increased mortality among children during the second registration year, which appears in the Table of ages. The total number of deaths from small-pox, measles, hooping-cough, and scarlet fever, in the first year was 9·87, or nearly one-tenth of the whole number of deaths; in the second year the proportion was increased to 22·52, or more than one-fifth of the whole mortality; consequently the deaths of grown-up persons in the second year are comparatively fewer than in the first. These diseases prevailed chiefly in the Ancoats and St. George's districts, localities most favourable to their development and propagation.

The following Table shews the corresponding proportions of deaths from epidemic and contagious diseases during each of the two years:—

Diseases.	Proportion per Cent.	
	1837-38	1838-39
Small-pox . . .	6·38	6·48
Measles . . .	1·84	9·91
Scarlatina . . .	0·37	2·17
Croup . . .	1·57	0·93
Hooping-cough .	1·28	3·96
Diarrhœa . . .	2·74	1·40
Fever . . .	9·18	5·55
Total . .	23·36	30·40

The mortality from fever was two-fifths less in the second year. The greater number of deaths from this cause occur in the fever wards, which are situated in the London-road district. The returns of deaths from the Market-street ward are greater comparatively than from any other of the registration districts. The infirmary and workhouse are situated in this district; consequently many deaths take place therein of persons not previously dwelling in the district, but in the surrounding neighbourhood. Hence, in forming a calculation as to the numbers of the population from the number of deaths, it becomes impracticable as regards this district, because the previous residence of the persons deceased is not generally stated in the registry. The same difficulty exists with respect to the London-road district. It follows that for the purpose of accurate results as regards the registration of births and deaths, not only ought both to be enforced, but in cases of death the place of the previous residence of the deceased should be inserted in the registry.

Ages at the time of Death.—It had long been generally supposed that the number of deaths in proportion to the population was greater in large manufacturing districts than in other less populous neighbourhoods. Until the returns made under the Registration Act were published, it was impossible to determine with accuracy what was the proportion, or at what ages the mortality was the greatest. Even now we can attain to certain information only as to the comparative numbers

of deaths at given ages. This however answers a useful purpose, as it affords the means of comparing the mortality in the distinct localities of the same district with the returns of deaths from different sections of other large towns.

With regard, first, to the comparative mortality in the several districts of Manchester: there are five registrar's districts, *viz.*, Ancoats, the chief seat of the cotton mills; St. George's, containing a large portion of the Irish population; Deansgate; London-road; and Market-street; the last three constituting the more ancient and principal parts of the town.

The results of the first year's registration are stated in the following Table:—

Districts.	Per-centage Proportion of Deaths at different Ages to the Total Mortality in 1837-38.					
	Under 3 years.	From 3 to 5.	From 6 to 15.	From 16 to 25.	From 26 to 50.	From 51 to 70.
Ancoats . . .	50·16	9·62	6·08	4·52	14·97	10·52
St. George's . .	48·06	9·08	4·98	6·30	16·61	10·18
Deansgate . . .	41·85	9·28	5·36	6·09	20·20	13·28
London-road . .	38·72	6·82	4·02	9·06	25·53	11·50
Market-street . .	25·76	6·54	6·23	9·84	28·77	16·

Hence it appears that the number of deaths under 6 years is greatest in Ancoats, and fewest in Market-street; and the difference is very great, *viz.*, $27\frac{1}{2}$ per cent.* From 6 to 26, the deaths are more numerous in Market-street, and fewer in Ancoats, by a difference of nearly $5\frac{1}{2}$ per cent. Above 26 and under 51 the deaths in Ancoats are nearly 15, and in Market-street nearly 29 per cent. Above 70 the deaths in Ancoats and Market-street respectively are as $10\frac{1}{2}$ to 16 per cent.

The second year (1838-39) was still more fatal to young children, owing principally to the prevalence of measles. It will be sufficient, for the confirmation of the general facts, to state that the same inequalities, but in somewhat different proportions, owing to the excess of mortality among children, is found to exist in both years. The following examples will suffice:—

Districts.	Per-centage Proportion of Deaths at different Ages to the Total Mortality in 1838-39.		
	Under 6 years.	From 6 to 25.	From 26 to 70.
Ancoats . . .	65·14	10·81	20·37
St. George's . .	66·43	9·19	20·90
Deansgate . . .	58·66	11·95	26·05
London-road . .	54·64	13·30	28·65
Market-street . .	40·76	11·77	39·65

With regard, secondly, to the comparative mortality in Manchester

* It has been suggested that this difference may be in part owing to the circumstance, that Market-street district contains a large number of warehouses and shops tenanted only by adult apprentices and warehousemen, and that consequently the proportion of children residing in it and subject to casualties is considerably below that existing in the Ancoats district.

and other towns, the following results are highly interesting. The returns here quoted for England and Wales, for the Metropolis and for Birmingham, are calculated from the Tables published in the Registrar-General's First Report for 1837-38; those for Liverpool are for the entire year 1838, from a paper published by Mr. Boardman, the Superintendent-Registrar of that district; those for Manchester are contained in the first Table of ages.

Districts.	Per-centage Proportion of Deaths at different Ages to the Total Mortality.		
	Under 4 years.	From 4 to 16.	From 16 to 21.
England and Wales . .	37.08	9.75	3.67
Metropolis	38.13	8.42	2.47
Birmingham	41.08	9.64	3.93
Liverpool	43.64	9.95	2.76
Manchester	44.46	9.50	3.27

Thus, although the proportion of deaths under 4 years in Manchester is nearly 1 per cent. greater than in Liverpool, and about $3\frac{1}{2}$ greater than in Birmingham, yet the deaths between 4 and 21 years are just the same as in Liverpool, and nearly 1 per cent. less than in Birmingham.

The difference of mortality in these several districts has not hitherto been satisfactorily explained. The mortality during the first year of age was greatest in Birmingham; Manchester at this age ranking less than in Birmingham by 5 per cent., and 1 per cent. less than in London.

It is only however in the second year of life that any great difference commences. Manchester is nearly 7.7 higher than Birmingham, and nearly 6.4 above London. Liverpool is a small fraction under Manchester. The comparative mortality of both Birmingham and Manchester is greatest at this age.

If we are to ascribe the mortality in these places to the factory or manufacturing system, it must not be to the working of infants, but to some other cause. The periods in which young persons are employed in the workshops or factories of Europe are not between 1 and 5 years of age, but between 10 and 21. Now, it is proved that the deaths from 6 to 21 inclusive, are, in the Metropolis, 7.7 per cent.; in Manchester, 9.4 per cent.; and in Birmingham, 11.1 per cent. So that, in fact, whilst in Birmingham about 34 infants in every 100 die in the first year, in Manchester the deaths are not 29 in every 100 at the same age; and, in those periods when persons between infancy and adult age are likely to be employed in manufactories or factories, the returns give an equally favourable result in the following order:—in the Metropolis 8, in Manchester $9\frac{1}{2}$, and in Birmingham above 11 per cent., of deaths of persons between the ages of 6 and 21 years.

The great mortality among children under 2 years of age is not *directly* chargeable to the factory system. The mortality between 16 and 20 is greater in Birmingham than in Manchester, for those are the two places especially contrasted. To what cause, therefore, may it be

attributed? To no one in particular. The manners and habits of the people have much to do with it. That some localities are less healthy than others there can be no doubt. The most plausible reason which I can find, is, not that the youths die in factories, but that very young children are, under the existing system, not sufficiently taken care of by the mothers—both as regards themselves during gestation, and their offspring after child-birth. The women, during pregnancy, continue as long as possible at their work, and after child-birth return to it sooner than they ought, leaving their infants to the care of ill-paid and unsuitable persons. Nor ought we to omit, that soothing drugs, such as the well-known nostrum, Godfrey's Cordial, are often had recourse to, with a view to ease the pains and to quiet the restlessness of infants; and it is perhaps to this improper use of narcotics that the frequent deaths from convulsions may be attributed. However desirable it may be, on other grounds, to regulate the labour of youths in factories, it is still more expedient, that mothers should not, if possible, be abstracted from attention to their helpless infants, particularly during the periods of lactation and teething.

Marriages.—The number of marriages in the churches during the first year was 3,045, and in other places 186; in the second year, 3,155 in the churches, and in other places 212; exhibiting an increase in the second year of 110 in churches, and of 26 in other places. The greatest number of marriages was in the December and September quarter of each year, the per-centage proportion being 30 and 24·8; the least in March and June quarters, each being nearly equal to 23 per cent. The proportion of church-marriages to marriages elsewhere is 93·58 to 6·42 per cent. In every 100 marriages there were solemnized by license 9·66; by Superintendent-Registrar's certificate 6·30, and by banns 84·4. The number of marriages in church without banns and by Superintendent-Registrar's certificate was 0·58 per cent. Among every 100 persons married 14·25 were minors.

Marks and Signatures as indicating the state of Education.—The number of persons writing their names in the Registry of Births during the first year, compared with the number signing by marks, was as 38·15 to 61·85; and during the second year as 39·53 to 60·47; the average was as 38·84 to 61·16. Of persons signing the Registry of Deaths, 39·66 signed their names, and 60·34 their marks, in the first year; and during the second year, the signatures to marks were as 42·19 to 57·81; the average proportion of the two years was as 40·93 to 59·07.

There is therefore a difference in the class of persons signing the Registry of Births from those signing the Registry of Deaths; in the former case the marks form 61·16 per cent. of the whole number, and in the latter case 59·07, a difference of about 2 per cent., owing, most likely, to the more frequent Registry of Births by the mothers, and shewing that these are less able to write.

Uniting the births and deaths, the signatures are to marks as 39·8 to 60·2; exhibiting a lamentable deficiency in the state of public education, when only 40 persons in 100 are found capable of attesting some of the most important events in civil society, by signing their own names.

The calculation shews an improvement in the second year, though it is but slight and may be merely accidental. In the state of education

in the different districts there is a yet more marked difference. In Ancoats the proportion of signatures is only 26 per cent., or nearly 3 out of 4 persons are incapable of writing. In London-road 34, in St. George's 43, in Deansgate 44, and in Market-street nearly 60 per cent. It is not easy to explain these discrepancies, as, for instance, why London-road should be least in signatures next to Ancoats, nor why St. George's should be above Deansgate. It must however be observed that Market-street district contains the dwellings of the more respectable shopkeepers.

It is a fact worthy of notice, that while, in the attestation of births and deaths, the marks exceed the signatures by 20 per cent., the proportion is reversed in the attestation of marriages, the average proportion of signatures to marks being as 55 to 45.

Here, however, there is a considerable difference. In the Collegiate Church records, the signatures are to marks as 50·5 to 49·5; in other places not churches, but including all the Catholic chapels, the proportion of signatures is 55·6; at St. Mary's Church it is 74·7, or nearly three-fourths. At St. John's 76·5, above three-fourths; and at other churches, in a few cases, as high as 82·3. These facts would lead to the inference that the parties forming marriages are generally a better instructed and higher class than the average of the population, or that they are usually at a time of life when the effects of an early education have not been erased by disuse and neglect.*

The calculation, it must be noticed, on births and deaths, includes 21,845 persons, and that on marriages 26,392.

It will not be uninteresting, and it cannot but be satisfactory, whilst exhibiting the deficiency in public education, to be able to prove its comparative improvement. During a period of six years, from 1807 to 1812, there were married in the Collegiate Church of Manchester 7,505 couples. Out of the 15,010 persons married, 5,254 signed their names, and 9,756 their marks. These numbers are in the proportion of 35 to 65, the excess of marks amounting to 30 per cent. In the same church, during the two years in which the Registration Act has been in operation, the signatures are as 55 to 45, an excess of signatures to the amount of 10 per cent.; making the total difference in the two periods an increase in signatures over marks of 20 per cent.

TABLE I.—*Number of Births in each Quarter within the whole District.*

Quarters ended	1837-38.			1838-39.			Twin Births.	
	Males.	Females.	Total.	Males.	Females.	Total.	1837-38.	1838-39
30th Sept. . .	553	501	1054	834	775	1609	11	11
31st Dec. . .	621	615	1236	766	725	1491	17	14
31st March. . .	743	706	1449	852	742	1594	17	19
30th June . .	875	844	1719	851	813	1664	15	23
Total . . .	2792	2666	5458	3203	3055	6358	60†	67

* It has been suggested that the excess here noticed is caused by the entries of births and deaths being very frequently made by nurses and charwomen, and not by the parents themselves.

† Exclusive of one triple birth. In the two years the twin and triple births gave 129 boys and 128 girls.

TABLE II.—*Number of Births in each District during the entire Years.*

Districts.	1837-38.			1838-39.			Twin Births.	
	Males.	Females.	Total.	Males.	Females.	Total.	1837-38.	1838-39.
Ancoats. . .	733	713	1446	833	808	1691	17	16
St. George's . .	552	532	1084	726	649	1375	11	22
Market-street . .	424	391	815	469	428	897	9	11
London-road . .	602	561	1163	596	557	1153	17	7
Deansgate . .	481	469	950	629	613	1242	7	11
Total . .	2792	2666	5458	3303	3055	6358	60	67

TABLE III.—*Number of Deaths in each Quarter within the whole District.*

Quarters ended	1837-38.			1838-39.		
	Males.	Females.	Total.	Males.	Females.	Total.
30th Sept. . .	630	613	1243	638	600	1238
31st Dec. . .	686	530	1216	834	812	1646
31st March. . .	876	791	1667	892	857	1749
30th June . .	774	711	1485	844	757	1601
Total . .	2966	2645	5611	3208	3026	6234

TABLE IV.—*Number of Deaths in each District during the entire Years.*

Districts.	1837-38.			1838-39.		
	Males.	Females.	Total.	Males.	Females.	Total.
Ancoats. . .	609	607	1216	750	694	1444
St. George's . .	484	419	903	575	580	1155
Market-street . .	766	534	1300	717	621	1338
London-road . .	566	522	1088	600	584	1184
Deansgate . .	541	563	1104	566	547	1113
Total . .	2966	2645	5611	3209	3025	6234

Note.—The number of deaths upon which a coroner's inquest was held was 263 in 1837-38, and 298 in 1838-39. The number of deaths in the Infirmary, which is situated in the Market-street district, was 520 in the two years; the number in the workhouse, which is in the same district, was 559; and the number in the fever wards, which are in the London-road district, was 427 in the same period.

TABLE V.—Principal Causes of Death Registered in each of the Two Years, ended 30th June 1839.

		1837-38.						1838-39.					
		Ancients.	St. George's.	Market-street.	London-road.	Deansgate.	Total.	Ancients.	St. George's.	Market-street.	London-road.	Deansgate.	Total.
Epidemic, Endemic, and Contagious Diseases.	Small-pox	86	63	65	77	67	358	113	101	35	90	85	424
	Measles	32	18	12	30	11	103	190	105	97	119	107	618
	Scarlatina	6	3	4	1	7	21	38	38	29	29	10	141
	Croup	22	11	19	18	18	88	17	13	8	10	10	58
	Hooping-cough	19	10	9	30	4	72	68	48	40	46	45	247
	Diarrhœa	47	24	15	38	30	154	17	15	10	17	28	87
	Fever	58	49	73	279	56	515	44	26	46	205	25	346
		270	178	197	473	193	1311	487	346	265	516	316	1924
Diseases of the Nervous System.	Cephalitis	12	13	21	4	15	65	7	11	16	5	15	54
	Hydrocephalus	19	29	26	19	37	130	23	23	43	34	24	147
	Convulsions	185	142	64	82	105	578	177	86	84	82	108	537
	Apoplexy	10	4	17	6	4	41	6	3	14	5	3	31
	Paralysis	2	9	27	17	7	62	2	12	18	8	7	47
	Epilepsy	1	1	1	1	1	5	5	4	5	1	5	20
	Insanity	1	2	10	..	6	19	2	1	21	1	4	29
	Delirium Tremens . . . .	..	1	2	..	..	3	2	3	4	..	..	9
		..	..	6	1	5	12	1	3	7	5	4	20
		230	201	174	130	180	915	225	146	212	141	170	894
Diseases of the Respiratory Organs.	Asphyxia	1	..	..	1	..	2	2	10	1	..	..	13
	Bronchitis	1	..	31	7	6	45	1	..	23	2	..	26
	Pneumonia	154	61	88	76	83	462	119	96	95	78	76	464
	Pleurisy . . . .	..	2	4	..	2	8	1	6	2	6	3	18
	Hydrothorax . . . .	..	1	16	2	2	21	..	3	18	4	2	27
	Asthma	37	43	39	22	20	161	31	25	38	9	33	136
	Hæmoptysis . . . .	..	..	..	..	..	..	3	1	3	2	3	12
	Decline	74	71	45	41	83	314	200	36	50	77	162	525
	Consumption	135	118	167	96	170	686	57	93	141	80	84	455
	Disease of Lungs . . . .	..	1	3	26	6	36	..	1	6	22	2	31
		402	297	393	271	372	1735	414	271	377	280	365	1707
Disease of Heart, &c. . . .		4	5	21	8	11	49	9	4	28	2	5	48
Disease of the Digestive Organs.	Teething	91	39	38	28	50	246	84	79	36	37	58	294
	Enteritis	25	10	22	5	23	85	17	17	18	18	21	94
	Tabes Mesenterica . . . .	..	..	4	2	..	6	1	9	1	..	..	11
	Ulcer of Stomach . . . .	..	..	..	..	..	..	..	4	10	2	2	18
	Worms . . . .	..	..	..	..	1	1	..	2	3	2	4	11
	Disease of Stomach, &c. . . .	5	..	6	4	4	19	10	5	9	7	8	39
		1	3	8	..	3	15	..	..	..	..	..	..
		122	52	78	39	81	372	112	116	77	66	96	467

TABLE V.—Principal Causes of Death, &c.—continued.

		1837-38.						1838-39.					
		Ancoats.	St. George's.	Market-street.	London-road.	Deansgate.	Total.	Ancoats.	St. George's.	Market-street.	London-road.	Deansgate.	Total.
Disease of Liver . . .		3	3	19	4	9	38	4	5	11	3	1	24
Child-bed		9	3	8	7	12	39	11	10	8	5	11	45
Rheumatism		1	7	3	..	10	21	..	2	1	4	8	15
Disease of Joints . . .		1	..	16	1	..	18	..	..	..	..	..	..
Caries		3	..	10	2	..	15	..	..	..	..	..	..
		5	7	29	3	10	54	..	2	1	4	8	15
Sporadic Diseases.	{ Dropsy	32	21	54	25	30	162	42	30	48	19	27	166
	{ Mortification . . .	..	2	5	3	2	12	2	1	10	5	3	21
	{ Cancer . . . . .	..	..	4	7	1	12	2	..	8	2	6	18
	{ Intemperance . . .	2	1	6	..	2	11	1	2	2	3	3	11
	{ Atrophy . . . . .	..	9	7	14	..	30	..	16	3	3	..	22
	{ Debility	1	6	5	11	26	49	10	70	11	36	25	152
	{ Premature Birth . .	8	1	8	2	..	19	12	..	11	4	2	29
		43	40	89	62	61	295	69	119	93	72	66	419
Decay		66	18	22	14	8	125	1	49	4	8	14	76
Old Age. . . . .		..	36	47	30	20	142	69	21	45	26	24	185
		66	54	69	44	37	270	70	70	49	34	38	261
Violence.		34	21	134	16	26	231	29	18	141	19	27	234
Total of above . . .		1188	861	1211	1057	992	5309	1430	1107	1262	1142	1097	6038
Other Diseases . . .		28	42	89	31	112	302	14	48	76	42	16	196
Total Diseases . . .		1216	903	1300	1088	1104	5611	1444	1155	1338	1184	1113	6234

TABLE VI.—Of Ages at the time of Death; First Year, 1837-38.

Ages.	Ancoats District.		St. George's District.		Deansgate District.		Lonsdale District.		Market-street District.		Total of Deaths.	Average of the 5 Districts. Per Cent.
	Total.	Per Cent.	Total.	Per Cent.	Total.	Per Cent.	Total.	Per Cent.	Total.	Per Cent.		
Not above 1 Year . .	440	36.184	292	32.336	332	30.209	293	27.409	230	17.692	1587	28.405
From 1 to 2 Years . .	170	13.980	142	15.726	128	11.647	121	11.319	105	8.077	666	11.920
2 3	73	6.004	44	4.872	45	4.094	38	3.555	31	2.385	231	4.135
3 4	22	1.809	21	2.323	29	2.639	21	1.964	37	2.846	130	2.327
4 5	22	1.809	17	1.883	29	2.639	14	1.309	17	1.308	99	1.772
Not above 5	727	59.786	516	57.142	563	51.228	487	45.556	420	32.308	2713	48.559
From 5 to 10	44	3.619	31	3.433	42	3.822	26	2.432	44	3.385	187	3.347
10 15	30	2.467	14	1.550	17	1.546	17	1.590	37	2.846	115	2.058
15 20	24	1.974	23	2.547	34	3.094	48	4.490	54	4.154	183	3.275
20 25	31	2.549	33	3.654	33	3.003	50	4.677	74	5.692	221	3.956
25 30	27	2.221	36	3.986	49	4.458	57	5.332	74	5.692	243	4.349
30 35	40	3.290	26	2.880	48	4.367	48	4.490	78	6.000	240	4.296
35 40	41	3.372	31	3.433	47	4.276	49	4.584	80	6.154	248	4.439
40 45	46	3.783	24	2.658	39	3.549	59	5.519	72	5.539	240	4.296
45 50	28	2.303	33	3.654	37	3.367	60	5.613	70	5.385	228	4.081
50 55	28	2.303	24	2.658	39	3.549	34	3.181	40	3.077	165	2.953
55 60	38	3.125	20	2.215	30	2.730	32	2.994	60	4.615	180	3.222
60 65	30	2.467	25	2.768	41	3.731	27	2.526	50	3.846	173	3.096
65 70	32	2.631	23	2.547	36	3.276	30	2.806	58	4.462	179	3.204
70 75	24	1.974	20	2.215	14	1.274	20	1.871	45	3.461	123	2.202
75 80	15	1.233	13	1.440	19	1.729	13	1.216	24	1.846	84	1.503
80 85	8	0.657	11	1.220	7	0.637	9	0.842	10	0.769	45	0.805
85 90	2	0.164	..	..	4	0.364	2	0.187	7	0.538	15	0.269
90 95	1	0.082	..	..	..	..	..	..	3	0.231	4	0.072
95 100 . . . . .	..	..	..	..	..	..	..	..	..	..	1	0.018
Total 100 and under .	1216	100.000	903	100.000	1099	100.000	1069	100.000	1300	100.000	5587*	100.000

* The total deaths were 5611; there were 24 at unknown ages.

TABLE VII.—Of Ages at the time of Death; Second Year, 1838-39.

Ages.	Ancients District.		St. George's District.		Deansgate District.		London-road District.		Market-street District.		Total of Deaths.	Average of the 5 Districts. Per Cent.
	Total.	Per Cent.	Total.	Per Cent.	Total.	Per Cent.	Total.	Per Cent.	Total.	Per Cent.		
Not above 1 Year . .	447	30.977	342	29.662	338	32.165	299	25.490	264	19.746	1710	27.497
From 1 to 2 Years . .	265	18.365	214	18.560	159	14.286	180	15.345	139	10.396	937	15.389
2 3 " " . .	131	9.078	111	9.627	71	6.379	80	6.820	80	5.984	473	7.606
3 4 " " . .	60	4.158	68	5.898	41	3.684	55	4.689	39	2.917	263	4.229
4 5 " " . .	37	2.564	31	2.688	24	2.156	27	2.302	23	1.720	142	2.283
Not above 5 " " . .	940	65.142	766	66.435	633	58.670	641	54.646	545	40.763	3545	57.004
From 5 to 10 " " . .	65	4.505	46	3.990	45	4.043	45	3.836	53	3.965	254	4.084
10 15 " " . .	31	2.148	12	1.041	21	1.887	17	1.449	26	1.945	107	1.721
15 20 " " . .	34	2.356	19	1.648	29	2.606	38	3.240	42	3.142	162	2.605
20 25 " " . .	26	1.802	29	2.515	38	3.414	56	4.774	60	4.488	209	3.361
25 30 " " . .	32	2.218	32	2.775	43	4.043	41	3.751	67	5.012	220	3.538
30 35 " " . .	36	2.495	24	2.082	31	2.785	48	4.092	65	4.863	204	3.280
35 40 " " . .	26	1.802	37	3.209	39	3.504	57	4.859	62	4.638	221	3.554
40 45 " " . .	37	2.564	27	2.342	24	2.156	42	3.581	56	4.189	186	2.991
45 50 " " . .	24	1.663	25	2.168	44	3.953	49	4.177	83	6.208	225	3.618
50 55 " " . .	35	2.426	25	2.168	30	2.696	30	2.538	48	3.591	168	2.701
55 60 " " . .	41	2.841	30	2.602	29	2.606	24	2.046	48	3.591	172	2.766
60 65 " " . .	36	2.495	22	1.908	23	2.246	22	1.876	45	3.366	150	2.412
65 70 " " . .	27	1.871	19	1.648	23	2.066	20	1.705	56	4.189	145	2.331
70 75 " " . .	21	1.455	18	1.561	14	1.258	23	1.961	36	2.693	112	1.801
75 80 " " . .	22	1.525	11	0.954	8	0.719	7	0.597	30	2.244	78	1.254
80 85 " " . .	6	0.416	4	0.347	9	0.809	7	0.597	7	0.524	33	0.530
85 90 " " . .	2	0.138	3	0.260	6	0.539	1	0.085	7	0.524	19	0.305
90 95 " " . .	2	0.138	1	0.087	..	..	..	..	..	..	3	0.048
95 100 " " . .	..	..	3	0.260	..	..	2	.170	..	..	5	0.080
100 101 " " . .	..	..	..	..	..	..	..	..	1	0.075	1	0.016
Total 101	1443	100.000	1153	100.000	1113	100.000	1173	100.000	1337	100.000	6219	100.000

* The total deaths were 6234. There were 15 unknown as to age.

TABLE VIII.—*Number of Marriages in each Quarter.*

Quarters ended	1837-38.	Per-Centage Proportion in each Quarter.	1838-39.	Per-Centage Proportion in each Quarter.
30th Sept. . .	751	23·2	889	26·4
31st Dec. . .	992	30·7	1000	29·7
31st March. . .	700	21·7	678	20·1
30th June . .	788	24·4	800	23·8
Total . .	3231	100·	3367	100·

TABLE IX.—*Number of Marriages in each Place, distinguishing whether by Licence, Banns, or Certificate.*

Places.	1837-38.				1838-39.			
	Licences	Banns.	Certifi- cates.	Total.	Licences	Banns.	Certifi- cates.	Total.
Collegiate Church	210	2275	14	2499	203	2404	11	2618
St. John's . . .	93	245	4	342	79	256	1	336
St. Mary's . . .	16	179	1	196	16	159	1	176
Other Churches .	1	7	..	8	3	20	2	25
Total . .	320	2706	19	3045	301	2839	15	3155
Other Places . .	10	..	176	186	6	..	206	212
Total . .	330	2706	195	3231	307	2839	221	3367

Note.—In the first year 445, and in the second year 495 individuals were minors.

TABLE X.—*Number and relative Proportion of Signatures and Marks upon the Registration of Births and Deaths (both united) in each District.*

Districts.	1837-38.			1838-39.			Per Centage Proportion of Signatures in the Two Years.
	Signa- tures.	Marks.	Per Centage Proportion of Signatures.	Signa- tures.	Marks.	Per Centage Proportion of Signatures.	
Ancoats . . .	649	1977	24·7	855	2239	27·6	26·1
St. George's . .	830	1128	42·4	1091	1412	43·5	43·
Market-street . .	882	653	57·4	1051	631	62·4	59·9
London-road . .	639	1353	32·0	771	1354	36·3	34·1
Deansgate. . .	132	1080	46·3	1005	1310	43·4	44·8
Total . .	3932	6191	38·8	4776	6946	40·7	39·7

TABLE XI.—*A similar Table of Signatures and Marks upon the Registration of Marriages.*

Places.	1837-38.			1838-39.			Per Centge Proportion of Signatures in the Two Years.
	Signa- tures.	Marks.	Per Centge Proportion of Signatures.	Signa- tures.	Marks.	Per Centge Proportion of Signatures.	
Collegiate Church	5075	4921	50·8	5262	5210	50·2	50·5
St. John's . . .	1100	268	80·4	977	367	72·7	76·5
St. Mary's . . .	594	190	75·7	519	185	73·7	74·7
Other Churches .	28	4	87·5	77	23	77·	82·3
Other Places . .	415	329	55·7	471	377	55·5	55·6
Total . . .	7212	5712	55·8	7306	6162	54·2	55·

On the Population Bill now before Parliament for taking the Census of 1841.

A national census is among the most important statistical operations which a Government can execute, as its results must form the base for administrative and economical measures of the highest importance, and supply the elements of almost every statistical investigation. It is therefore a matter of great importance that the next census of the United Kingdom should be as complete as possible. The Report contained in the last number of the Journal will prove that the Council of the Statistical Society of London have endeavoured to awaken public attention to the subject. The Bill for providing for the census is now before the House of Commons. As originally introduced, it was framed upon the Acts of former years, and aimed at obtaining the same amount of information, with the addition of the ages of the population, omitted in the preceding census. An attempt was also made, for the first time, to ascertain the annual value of the assessable property in the country; but this was to be obtained in a manner that could only lead to error, namely, by guesses on the part of the persons employed to take the census.

The same cumbrous machinery as heretofore was to be used, with the exception that the relieving officers were to be employed in the Poor Law unions. The clerks of the peace and the town-clerks were to receive the Act and Forms, and to transmit them to the high constables, who were to deliver them to the overseers and relieving officers, who were to make the enumeration, and to deliver abstracts for each parish to the justices of the peace, to be forwarded by them to the Secretary of State. The improved facilities afforded by the new Poor Law and new Registration systems were almost entirely overlooked. These imperfections could hardly escape notice, even if the Report of this Society had not called attention to the defects of former censuses and to existing means of improvement. Considerable interest was excited on the subject, and the whole Bill has since been remodelled by the Government. The following are its main provisions:—

The whole census is to be conducted by the Registrar-General and one or more Commissioners to be appointed for the purpose, who shall

prepare the necessary forms, and direct and control the persons employed. In England the Registrars are to superintend the inquiry. They are to divide their districts into sections of a convenient size, and to appoint a qualified enumerator for each to be approved by the Superintendent Registrar. These enumerators are to take an account of the name, sex, age, and occupation, of every person in their district, and to ascertain whether they were born in the parish or county; also of the houses, inhabited, building, and uninhabited, distinguishing all places of religious worship; and these returns, not abstracted, but *in extenso*, when examined by the Registrars, and further approved by the Superintendent Registrars, are to be forwarded to the Commissioners for the purpose of abstraction. The attempt to obtain an uncertain valuation of property is abandoned. It is obvious that these are great improvements in the system. First, the officers employed are all under one control, acting upon an uniform system, and qualified by their previous occupations, or selected, for the duty. The returns are to be made *in extenso*, and can therefore be checked and corrected. The abstracts will be made upon one well-digested system; and as the original returns will be kept, any further combination of particulars may be prepared. As the Registration system is not extended to Scotland, the old machinery is to be used there, but the same information in the improved form will be obtained. The domestic condition, religious persuasion, and health of the population, recommended in the Report as fit objects of inquiry, are omitted, leaving thus only room for regret that the census, although nearly perfect in its method, is not so extensive in its objects as might be desired.

PROCEEDINGS OF STATISTICAL SOCIETY OF LONDON.

Sixth Ordinary Meeting, Monday, April 20, 1840.

THOMAS TOOKE, Esq., V.-P., in the Chair.

The Chairman announced that His Royal Highness Prince Albert had been graciously pleased to accept the appointment of Patron.

The following gentlemen were proposed as candidates for admission: Philip Pusey, Esq., M.P., Grosvenor-square; and Charles Bird, Esq., Thavies-inn. The following gentlemen were elected: William Ratray, Esq., James Luke, Esq., Walter Ruding Deverell, Esq.

The paper read was "On the Sickness and Mortality in Western Africa," by Major Tulloch.

This paper, which was mainly founded upon the Report of Major Tulloch, on the Sickness and Mortality of the Troops in Western Africa, recently presented to Parliament, contains information relating to the settlement of Sierra Leone, Gambia, Cape Castle, &c., similar in nature to that which has appeared in Reports upon other British dependencies, published in previous numbers of the Journal.

Seventh Ordinary Meeting, Monday, May 18, 1840.

WORONZOW GREIG, Esq., F.R.S., in the Chair.

The Hon. Richard Carleton, of 25, Bruton-street; Thomas Mason, Esq., of Copt Hewick, near Ripon; were proposed as candidates for admission: and Charles Bird, Esq., and Philip Pusey, Esq., M.P., were elected Fellows.

A paper was read "On the Vital Statistics of Manchester," by William Johns, Esq., M.D., Superintendent-Registrar. (See p. 191.)

Eighth Ordinary Meeting, June 15, 1840.

JAMES HEYWOOD, Esq., F. R. S., in the Chair.

Isaac Weld, Esq., Hon. Sec. Royal Dublin Society, of Ravenswell, Co. Dublin; and Robert Castle Jenkins, Esq., 53, Queen Anne-street; were proposed as candidates for admission. The Hon. Richard Carleton and Thomas Mason, Esq., were elected Fellows.

It was announced that the Rev. John Diell, of Honolulu, Sandwich Islands, had been elected a Corresponding Member of the Society, and a letter from that gentleman was read, transmitting some numbers of the Hawaiian Spectator, a quarterly periodical published in those Islands.

The paper read was "On the Statistics of the Metropolitan Commission in Lunacy," by Lieut.-Col. Sykes, F.R.S., &c. (See p. 143.)

Dr. Hamel, of the Imperial Academy of Sciences at St. Petersburg, exhibited a portion of a very minute statistical description of the manufacturing industry of Moscow, together with a detailed plan of that city, prepared for statistical purposes, which he is about to complete and publish.

MISCELLANEOUS.

Average Prices of Corn per Imperial Quarter, in England and Wales, with the Rate of Duty on Foreign Wheat, during each Week from 27th March to 19th June 1840; also of each Month and of the Quarter ended Lady-day, 1840. (Continued from p. 110.)

Date.	Wheat.			Weekly Average.				
	Weekly Average.	Aggregate Average.	Duty on Foreign.	Barley.	Oats.	Rye.	Beans.	Peas.
Weeks ended:	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
March 27 . .	69 1	67 7	18 8	39 9	26 0	36 1	41 0	40 7
April 3 . . .	68 7	68 1	16 8	40 0	25 9	37 4	41 9	41 0
10 . . .	68 11	68 6	16 8	39 11	25 2	37 0	41 3	41 1
17 . . .	69 6	68 11	16 8	40 9	25 1	38 2	42 4	41 6
24 . . .	68 7	69 0	13 8	39 11	25 4	37 4	42 9	42 0
May 1 . . .	68 5	68 10	16 8	39 8	25 11	37 6	42 11	42 0
8 . . .	68 1	68 8	16 8	38 6	26 10	36 9	43 11	41 6
15 . . .	68 7	68 8	16 8	38 5	27 6	37 2	44 2	41 7
22 . . .	68 0	68 6	16 8	37 3	27 3	37 2	44 10	42 5
29 . . .	67 10	68 3	16 8	37 0	27 1	37 3	44 6	41 11
June 5 . . .	67 1	68 0	16 8	36 4	27 10	39 3	45 4	43 7
12 . . .	67 7	67 10	18 8	35 9	27 6	37 1	45 1	44 6
19 . . .	67 4	67 9	18 8	35 10	28 4	36 8	45 0	43 1
Months:								
March . . .	68 4	. .	. .	39 3	25 8	37 1	40 9	40 5
April	68 10	. .	. .	40 1	25 4	37 5	42 0	41 4
May	68 2	. .	. .	38 2	26 11	37 2	44 0	41 10
Quarter ended } Lady Day . }	66 5	. .	. .	39 0	24 6	37 7	40 6	40 4

An Abstract of the Net Produce of the Revenue of Great Britain in each of the Years and Quarters ended 5th April, 1839 and 1840.

Description.	Years ended 5th April,			
	1839.	1840.	Increase.	Decrease.
	£.	£.	£.	£.
Customs	19,504,628	20,001,267	496,639	..
Excise	11,999,772	12,040,737	40,965	..
Stamps	6,604,936	6,592,396	..	12,590
Taxes	3,700,682	3,714,412	13,730	..
Post-Office	1,518,000	1,247,000	..	301,000
Crown Lands	145,000	160,000	15,000	..
Miscellaneous	90,408	88,245	..	2,163
Imprest and other Monies	506,095	416,926	..	89,139
Repayments of Advances.	641,686	724,153	82,467	..
Total Income . . .	44,741,257	44,985,166	648,801	404,892

Description.	Quarters ended 5th April,			
	1839.	1840.	Increase.	Decrease.
	£.	£.	£.	£.
Customs	4,411,569	4,572,623	161,054	..
Excise	1,841,511	1,929,996	88,485	..
Stamps	1,640,253	1,655,188	17,935	..
Taxes	176,440	179,058	2,618	..
Post-Office	392,000	120,000	..	272,000
Crown Lands	40,000	40,000	..	..
Miscellaneous	35,545	37,180	1,635	..
Imprest and other Monies	31,853	31,913	60	..
Repayments of Advances.	125,786	110,756	..	15,030
Total Income . . .	8,694,957	8,679,714	271,787	287,030

Total Increase on the Year, £243,909: Total Decrease on the Quarter, £15,243.

An Abstract of the Income and Charges of the Consolidated Fund in each of the Quarters ended 5th April, 1839 and 1840.

INCOME.			CHARGE.		
Description.	Quarters ended 5th April,		Description.	Quarters ended 5th April,	
	1839.	1840.		1839.	1840.
	£.	£.		£.	£.
Customs	3,991,146	3,839,464	Permanent Debt . .	3,538,968	3,541,638
Excise	1,862,449	1,950,212	Terminable Annuities	1,387,160	1,395,532
Stamps	1,640,253	1,655,188	Interest on Exche-		
Taxes	176,440	179,058	quer Bills . . . }	16,371	22,960
Post Office	392,000	120,000	Sinking Fund . . .	..	..
Crown Lands	40,000	40,000	Civil List	96,510	96,801
Miscellaneous	35,545	37,180	Other Charges . . .	326,959	350,174
Imprest and other Monies	31,853	31,913	Charge for Advances.	421,677	279,850
Repayments of Advances	125,786	110,756			
Total	8,295,472	7,966,771	Total Charge . . .	5,787,645	5,666,955
Cash applied to pay off			The Surplus . . .	2,807,827	2,529,816
Deficiency Bills. . . }	300,000	230,000			
Total Income . . .	8,595,472	8,196,771	Total	8,595,472	8,196,771

An Account of the Quantities of Foreign and Colonial Wheat and Wheat-Flour Imported, paid Duty, and Wheat remaining in Warehouse, in each of the Months ended 5th of April, May, and June, 1840. (Continued from p. 110.)

Months ended	Wheat.			Wheat Flour.		
	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.
	Qrs.	Qrs.	Qrs.	Cwts.	Cwts.	Cwts.
5th April..	55,676	5,377	263,220	55,758	9,133	266,380
5th May ..	229,756	112,477	377,863	101,713	93,297	251,454
5th June ..	346,473	321,538	393,646	207,490	287,186	146,580

Quarterly Averages of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ended 31st March, 28th April, 26th May, and 23rd June, 1840, and in the corresponding Quarters of the preceding Year. (Continued from p. 109.)

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
1839.	£.	£.	£.	£.	£.	£.
2nd April	18,371,000	8,998,000	27,369,000	22,987,000	7,073,000	30,060,000
30th April ...	18,350,000	8,107,000	26,457,000	23,112,000	6,023,000	29,135,000
28th May	18,214,000	7,814,000	26,028,000	23,543,000	5,119,000	28,662,000
25th June ...	18,101,000	7,567,000	25,668,000	93,934,000	4,344,000	28,278,000
1840.						
31st March ..	16,818,000	7,704,000	24,522,000	23,113,000	4,360,000	27,473,000
28th April ...	16,831,000	7,296,000	24,127,000	22,726,000	4,318,000	27,044,000
26th May	16,817,000	7,226,000	24,043,000	22,556,000	4,386,000	26,942,000
23rd June	16,871,000	7,122,000	23,993,000	22,402,000	4,434,000	26,836,000

Aggregate Amount of Notes circulated in England and Wales by Private Banks, and by Joint Stock Banks and their Branches, respectively, in each of the Quarters ended 28th December 1838-39, and 28th March 1839-40. (Continued from p. 109.)

Quarters ended	1838-39.			1839-40.		
	Private Banks.	Joint Stock Banks.	Total.	Private Banks.	Joint Stock Banks.	Total.
	£.	£.	£.	£.	£.	£.
28th Dec. ..	7,599,942	4,625,546	12,225,488	7,251,678	4,170,767	11,422,445
28th March .	7,642,104	4,617,363	12,259,467	6,893,012	3,910,232	10,803,244

QUARTERLY JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

OCTOBER, 1840.

Tenth Meeting of the British Association for the Advancement of Science. September, 1840.

THE Tenth Meeting of the British Association for the Advancement of Science, was held at Glasgow during the week commencing on Thursday the 17th, and terminating on Wednesday the 24th September.

The Statistical Section had the following gentlemen for its officers and committee:—

President.—Viscount Sandon, M.P., Pres. S. S. of London, &c.

Vice-Presidents.—Sheriff Alison, Rev. T. Chalmers, D.D.; Lieut-Colonel Sykes, F.R.S., Vice-Pres. S. S.

Secretaries.—Professor Ramsay, C. R. Baird, Esq., Rawson W. Rawson, Esq., F.S.S.

Committee.—The Lord Provost of Glasgow; Professor Adrian of Giessen; W. P. Alison, M.D.; John Alston, Esq.; Edwin Chadwick, Esq., F.S.S.; James Cleland, LL.D.; J. C. Colquhoun, Esq., M.P., F.S.S.; Professor R. Cowan, M.D.; William Felkin, Esq., F.S.S.; Allan Fullerton, Esq.; Richard Griffith, Esq., F.S.S.; Webb Hall, Esq.; James Heywood, Esq., F.R.S., F.S.S.; John Houldsworth, Esq.; Right Hon. Sir Alex. Johnston; George Kenrick, Esq.; John Leadbetter, Esq.; Sir Francis Mackenzie, Bart.; Sir John McNeil, G.C.B.; R. J. Murchison, Esq., F.R.S., F.S.S., &c.; Marquis of Northampton, Pres. R.S.; W. C. Taylor, LL.D.; R. Wallace, Esq., F.S.S.; R. Wallace, of Kellie, M.P.; J. Wilson, Esq. of Thornlie.

The following papers were read before the Section:—

Thursday, 17th Sept.

1. On the State of Crime in Glasgow, by Captain Miller, Superintendent of Police.
2. A General View of the Population, Trade, and Commerce of Glasgow, by James Cleland, LL.D.
3. On the Progress of the Glasgow Asylum for the Blind, by John Alston, Esq.

Friday, 18th Sept.

1. On the Application of Statistics to Moral and Economical Questions, by Rev. T. Chalmers, D.D.
2. Illustrations of the Practical Operations of the Scottish System of Managing the Poor, by W. P. Alison, M.D. (See page 211.)

Saturday, 19th Sept.

1. On the Vital Statistics of Glasgow compared with Edinburgh, Leith, &c., by Alex. Watt, Esq.
2. On the Bill Circulation of Great Britain and Ireland, by A. Leatham, Esq.
3. On the Excess of Population in the Highlands of Scotland, and on Emigration as a Remedy, by Dr. Alcorn.

Monday, 21st Sept.

1. Conclusion of Dr. Alison's Paper, commenced on Friday.

2. Vital Statistics of Glasgow, illustrating the Sanatory State of the Population, by Professor R. Cowan, M.D. (See p. 257).
3. On the State of Education and Crime in England, &c., contrasting the Counties of England with each other, by Mr. Joseph Bentley.

Tuesday, 22nd Sept.

1. Professor Johnston reported the progress of the Committee appointed to inquire into the Statistics of the Coal Fields of the North of England.
2. Mr. Boyce of Belfast reported the Progress of the Statistical Society of Ulster in its inquiries into Education and the Linen Trade of Ireland.
3. On the Mont de Piété System of Pawnbroking in Ireland, by H. J. Porter, Esq. (See p. 293).
4. An Account of the Principal Libraries in Germany, by Professor Adrian, of Giessen.
5. Dr. Chalmers gave the Results of his Experience with regard to the Pauperism of Glasgow.

Wednesday, 23rd Sept.

1. A Comparative Statement of Crime in London, Dublin, Liverpool, and Glasgow, by Captain Miller, Superintendent of Police. (Prepared at the request of the Section).
2. Report on the State of Crime in the Suburban Districts of Glasgow, by Mr. A. Rutherglen. (Prepared at the request of the Section.)
3. Comparative View of the Population of Scotland, by John Wilson, Esq. of Thornlie.
4. Report on the State of Education in Hull, by the Manchester Statistical Society.
5. A lengthened discussion took place on the Papers of Dr. Chalmers and Dr. Alison, read on previous days.

The sittings of the Section terminated on Wednesday, but as two papers remained to be read, besides three or four others which were withdrawn on account of there not being time to read them; and as several Gentlemen who had attended the Section wished to hear some further explanation of Mr. Porter's System of the Monts de Piété in Ireland, and of the views of Dr. Chalmers and Dr. Alison on the subject of Pauperism in Scotland, a meeting took place on the following day in the Hall of the College. Mr. James Heywood, F.S.S., was called to the Chair, and the following business was transacted.

1. A Paper was read by the Rev. P. Chalmers, on the Statistics of the Population and Agriculture of Dunfermline.
2. A Paper on the Statistics of the Glasgow Normal School, was read by Mr. Leadbetter.
3. Mr. Porter gave some explanations respecting the Mont de Piété System of Pawnbroking in Ireland.
4. A further discussion on Pauperism in Scotland took place, in which Dr. Chalmers, Dr. Alison, and others joined.

It will be observed that the anticipations expressed in the Report upon the previous meeting of the British Association,* that preparations would be made to lay some branches of the local statistics of Glasgow before the Section, have been realised. The valuable papers upon the Vital and Criminal Statistics of the city are not only of high interest, but are likely to prove instrumental in awakening the attention of the authorities and of the citizens to the evils which they disclose. Mr. Porter's paper on Pawnbroking has also given rise to a public meeting, and to the nomination of a committee, for the purpose of establishing a Mont de Piété at Glasgow; nor would it be proper to omit notice of the papers upon the important subject of Pauperism in Scotland, which

* Vol. ii. p. 299.

afforded Dr. Chalmers and Dr. Alison, the two rival authorities upon this question, an opportunity of bringing forward the facts upon which their opinions are founded.

A resolution was passed by the Committee of the Section, recommending that the Council of the Association should take steps to urge upon the Government the expediency of extending the system of registration of births, deaths, and marriages, now operating in England, to Scotland;* and the following grants of money were recommended by the committee, and sanctioned by the General Committee.

1. 100*l.* for continuing inquiries into the actual state of Schools in England Committed to Sir C. Lemon, Bart., M.P., Lieut.-Col. Sykes, H. Hallam, G. R. Porter, and J. Heywood, Esqrs.
2. 100*l.* for the purpose of inquiring into Vital Statistics. To Lieut.-Col. Sykes, Drs. W. P. Alison and R. Cowan, G. R. Porter, J. Heywood, E. Chadwick, and A. Watt, Esqrs.
3. 25*l.* for continuing inquiries into the Mining Statistics of the British Coal Fields. To Professor Johnston, H. T. De la Beche, W. L. Wharton, T. Wilson, J. Heywood, D. Milne, C. R. Baird, and T. Edington, jun., Esqrs.

The next meeting of the Association will be held at Devonport, but the day is not yet fixed.

Illustrations of the Practical Operation of the Scottish System of Management of the Poor. By W. P. ALISON, M.D., Professor of the Institutes of Medicine in the University of Edinburgh.

[Read before the Statistical Section of the British Association, on 18th September, 1840.]

IN laying some statements on this subject before this Section of the Association, I am perfectly aware that this is not the tribunal by which the question either of the religious obligation, of the humanity, or the policy, of a uniform and fixed provision for the poor is to be tried. I am well aware of the restrictions which have been wisely imposed on the discussion of any such questions here; and it is only in so far as I shall have it in my power to lay numerical statements before this meeting, illustrating the efficacy or inefficacy of the system now in force in Scotland regarding the management of the poor, that the subject can be properly brought under the view of the Section.

I may state it, however, as a matter of fact, that the Scotch Law on this subject differs from the English, and from the laws of the greater part of Europe, chiefly and most essentially in this, that it is a law continually and avowedly neglected or disobeyed; whereas in these other countries, the law on the subject is practically and uniformly enforced. The Statute Law of Scotland *requires* the heritors, ministers, and elders of parishes, and the magistrates of burghs, to make provision for the "needful sustentation of *all aged poor and impotent persons*, to enable them to live unbegged," and "to tax and stent the inhabitants" when necessary, for this purpose; but I need hardly say, that in practice this law is not strictly executed in any parish in Scotland; that in many hardly any attempt is made to execute it, and that the practice under it is exceedingly irregular, and bears no fixed relation either to the number or the degree of destitution of the poor; the sums applied in the

* A copy of this will be given in the next Number.

way of legal provision, for their relief, varying from $\frac{1}{2}d.$ to $3s. 6d.$ a head over the population of different parishes, and the smallest of these sums being awarded, not where the destitution is least, but on the contrary, according to the testimony of impartial observers, in districts where the condition of many of the poor is "as wretched as is compatible with human existence."*

I may also state it as a matter of fact, that the immediate cause of this extreme irregularity is that peculiarity of the Scotch practice, by which those persons, or the representatives of those, who are to pay the tax for this purpose, are vested with an uncontrolled power, both of levying the tax, and of apportioning the relief given by it, there being practically no appeal from the decisions on this last point, which are given by the heritors and kirk-sessions of parishes and the magistrates of burghs.

It is also matter of fact, and for the credit of the country it ought to be stated in connexion with what has now been said, that the reason why the practice of the country is so widely at variance with its statute law is, the prevalent belief, if not of the inexpediency of that law, at least of great and formidable evils being inseparably connected with its execution, and of the wisdom, therefore, of holding it in abeyance, and resorting to it only on extreme emergencies.

I believe it will not be denied that this opinion rests especially on two grounds—on the alleged effects of a uniform and efficient provision for the poor (such as was contemplated by the statute); *first*, on their *number*, and *secondly*, on their *character*. The practice under the law, and its remarkable deviation from the spirit of the law, have been regulated by the belief that any fixed and legal provision for the poor, on which they know that they can depend, necessarily tends to an increase of their number, and so aggravates the evils it is intended to relieve; and farther, that such provision necessarily destroys all independence of character in those who receive it, and thereby essentially injures the conduct and feelings of the lower orders and the morality of the country. It is plain that the *onus probandi* rests on those who counsel us to neglect a disobedience of the Statute Law of the Land; and that especially as the arguments used for the purpose appear obviously, and are explicitly stated by the most celebrated advocate of that opinion (Mr. Malthus), to apply equally against private charity (which, as he says, has always the same tendency as the legal provision), and therefore persuade us to give no direct obedience to the positive precepts of the Gospel.

I believe I have fairly stated the main grounds on which men of the most undoubted patriotism and benevolence not only approve of the present practice, but wish to see it carried much farther, and the voluntary system of relief to the poor everywhere substituted for the legal provision.

Now in regard to both these points, it is not only possible to have statistical information, but highly desirable that no other kind of information should be held to be satisfactory.

Many facts may be quoted which seem to me to prove, not only that the Scotch system of neglect or practical disobedience of the law has had

* Fullarton and Baird on the Highlands and Islands.

no beneficial effect in the way of repressing the numbers of the poor, but even that the pressure of population on subsistence has rapidly increased, and is peculiarly great, in Scotland; greater, I believe, more burdensome on many of the richer inhabitants, and more destructive of human life, of happiness, and of all reasonable prospect of religious and moral improvement in the sufferers themselves, than it is in any of those European countries where the relief of destitution is invested with the authority, and administered with the uniformity, of law. Even in the country districts of Scotland, I believe this will be found, on careful inquiry, to be the case to a greater extent than many suppose; and that it is not uniformly the case throughout the country, I take to be owing chiefly to two causes, *first*, to the residence of the families of many landed proprietors who are charitably disposed—a contingency for which the experience of other districts sufficiently indicates that there is no security; and, *secondly*, to the proximity, to most parts of the country, of pretty large towns, in which there is a more variable and often a more rapidly increasing demand for labour, and a greater variety of means of obtaining charitable assistance. It is, therefore, only by investigating the state of the population in the larger towns, that the degree of pressure of the population on the demand for labour, and on the means of subsistence throughout the country, can be duly estimated.

It has sometimes been stated, that poor families from country parishes resort in great numbers to the large towns merely in order to become paupers; but this is not a common case. They come to the great towns much more generally in search of work; but they come not only in greater number than the existing demand for labour permanently requires, but in many instances when partially disabled; and if they lose their employment or become disabled, wholly or partially, even within a short time after their arrival, they hardly ever return to their places of nativity, but remain at least the greater part of the year, to seek for irregular and precarious employment, and to swell the lists of suitors for public and private charities in the towns.

The existing law of settlement by three years' residence, as I am assured, has no foundation in statute, but only in the practice of certain parishes, which was first approved and sanctioned by the Court of Session as late as 1767. The Statute Law of 1579 expressly declares, that the parish which is bound to support every indigent person is the parish of his nativity, when known; and that it is only when the place of nativity cannot be ascertained, that he becomes chargeable on the place of his usual resort for the last seven years, which term was changed in 1663 to three years; and afterwards, in 1693, the term of seven years was restored; but since 1767 the place of usual resort for the last three years has been the only recognized ground of settlement.*

The following documents (some of which were laid before the public in my reply to Mr. Monypenny) prove to what an extent the charities, legal and voluntary, of Edinburgh and other large towns in Scotland, are burdened by persons from other parts of the country; they shew that a very large majority of the destitute poor, receiving charitable assistance in Edinburgh and other towns in Scotland, would be maintained by other

* See Dunlop on the Poor Laws of Scotland, and Report of a Speech by Mr. Drysdale, in the Edinburgh Town Council, in the *Scotsman* Newspaper, August 1840.

parts of the country if the Statute Law was restored, or the English practice as to settlement introduced; and even that a very considerable portion of them would be thrown back on other districts, if the law now in operation were so enforced throughout the country, as to offer the means of subsistence in every parish to all who are recognized as its legal poor.

Of 571 out-pensioners of the City Charity Workhouse, it has been found, on accurate scrutiny by Dr. Wallace, that only 259, or 1 in 3·36, are natives of Edinburgh; and of 432 inmates of that house, only 143 are natives. Now of the 901 paupers thus shewn to be deriving aid from the legal provision in Edinburgh, but who are not natives, a very small number only could, by the old Statute Law, have acquired a settlement there, and at least 800 would have been charged on the places of their birth or parentage, to which many of them would have been removed.

In like manner, of 999 paupers of Dundee, it appears that only 344 were natives of that town, and of the remaining 655—

570	are natives of other parts of Scotland.	
64	„ „	Ireland.
16	„ „	England.
3	„ „	British America.
2	„ „	Foreign Countries.*
<hr/>		
655		
<hr/>		

Of 1517 paupers at Aberdeen, only 420 are natives, and 616 are persons who have spent the best of their days before coming thither, many of whom became paupers immediately on the expiry of their three years' residence; hence, a recurrence to the Statute Law of Scotland would prove almost as great a relief to those towns as to Edinburgh.†

Of 272 paupers on the roll at Dumfries—

108	are natives of Dumfries.	
50	„ „	Ireland.
4	„ „	England.
110	are from different parts of Scotland.	
<hr/>		
272†		
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The same general observation applies to the medical charities, and to the different voluntary charities, of our great towns.

Thus, of 282 inmates of the Infirmary at Edinburgh, in April 1840, only 91 were natives of that town, and 124 had not even passed the prime of life in Edinburgh, having only come thither either very recently, or else at a time of life when their labour could no longer be useful to the city.

The number of stranger-poor in the hospitals of Glasgow appears to be still greater. Dr. Cowan found that, of 178 inmates of the Royal Infirmary, in April 1840, only 38 were natives of Glasgow, and 98 had not passed the prime of life there. Dr. Perry states, that not more than 15 per cent. of the patients admitted into the Albion-street Fever Hos-

* For this Table I am indebted to Dr. Davidson, of Dundee.

† This statement was published by Mr. Urquhart, one of the Magistrates of Aberdeen.

‡ This I have from Mr. Gemmell, Manager of the Poor at Dumfries.

pital were natives, and 25 per cent. had not been three years resident; that 30 per cent. were from Ireland, and 40 per cent. from the Highlands and agricultural districts of Scotland.

Of every 100 individuals received into the House of Refuge in Edinburgh, on account of their destitution, not more than 35 are found to be natives of that town; and of 230 inmates at one time, 93 were found to have been less than a year in Edinburgh.

Of 2,910 admissions into the Night Refuge connected with that Institution in Edinburgh, in July 1840—

1,185	were from	Edinburgh, St. Cuthbert's, and Canongate parishes.
86	„	Leith.
56	„	Dalkeith, Duddingston, Musselburgh, and Portobello parishes.
418	„	Lanark, and Renfrewshire.
601	„	all other parts of Scotland.
136	„	England.
423	„	Ireland.
25	were	Foreigners.

2,910*

Of 346 persons applying for relief to the Benevolent and Strangers' Friend Society, in July 1840, which is by no means restricted in its operation to persons who are strangers in Edinburgh, 14 were natives of Edinburgh.

Of persons not natives, but who have spent the prime of life in Edinburgh, there were—

65	Scotch.
51	Irish.
21	English.

137

Of persons not natives, and who have not spent the prime of life in Edinburgh, there were—

89	Scotch.
77	Irish.
29	English.

195

The Treasurer of the House of Refuge states that “many of the most destitute poor, even the lame and blind, entitled to aid from country parishes, refuse to leave Edinburgh, because little or nothing is done for the poor in their parishes;” and, in confirmation of this, nine of the clergymen, visitors of the Destitute Sick Society, and medical men, who have returned answers to the queries on these subjects lately circulated in Edinburgh, state, as consistent with their personal knowledge, that “many destitute persons living in Edinburgh are entitled to assistance in other towns, or country parishes, but do not claim it.” Of this many examples have fallen under my own observation.

I have a list of 48 poor families, with whom I have accidentally met, all living in a most destitute state in Edinburgh, who have, as yet, no parish claim in it, but state themselves to be parishioners of other parts of Scotland, to which, however, they will not return.

* These statements I have from Captain Thomson, Treasurer of the House of Refuge.

Again, another consequence of the inadequate provision in all parts of Scotland for those who cannot maintain themselves by labour, and of the total absence of provision for those who are unemployed, is the number of beggars and vagrants found, at least in certain seasons of the year, in all parts of the country. For example:—From a Table sent to me by Mr. Gray, of Peterhead, of the number of stranger-beggars and vagrants who have entered that town during eight years preceding 1840, it appears that the total number was 6,765, averaging 845 each year.

Mr. List, Superintendent of Police at Haddington, states, in an examination before a Committee of the House of Commons, that he considers all Scotland as very much infested with vagrants; and that there are many who domicile themselves in Edinburgh during the winter, and in summer make their circuit, content with lying in farm-offices and barns, and begging through the day. He states, further, that of those known to him as vagrants, he had not known any apprehended as criminals; from which I think it fair to infer that, with many of them at least, vagrancy is the consequence of destitution only.

To the same purpose, Dr. Somerville Alison, in a Report made to, and printed by direction of, the Poor Law Commissioners, states, as to the little town of Tranent, that “almost all who are comfortable, even working-people, afford some relief, *almost daily*, to some of the numerous beggars who crowd about their doors; and that there are there 15 or 20 lodging-houses, the head quarters of beggars, generally crowded with them and paupers, and in which men, women, and children, live and sleep promiscuously in the same rooms.” Mr. Gemmell, Manager of the Poor at Dumfries, gives, in a letter to myself, an instructive statement as to the vagrancy at that place, and as to the irregularity and inefficacy of the voluntary system in meeting it.

“About 60 of the permanent paupers had, for many years, been privileged to beg through the town every Saturday, with a large badge, or brass plate, with many others who joined in the ranks with no badge, but took their chance. They had also their set day in the country, and their set hour and call at every house and shop; some served them weekly, others every fortnight, and others monthly; houses and shops were besieged at the time. The town resolved to abandon this system, and to suppress all public begging; about 400*l.* was subscribed, annually, for four years, and each ‘badger,’ as he was called, was paid 1*s.* 6*d.* per week, and a lodging-house-keeper was engaged, to whom all beggars and vagrants were referred, by tickets, for supper and bed; this cost upwards of 100*l.* per annum. *Subscriptions began to fail from those who could well afford it*, and this system was of necessity abandoned. A voluntary assessment was next resorted to, for one year, but it *also failed*; hence our legal assessment since June 1834.” The expenditure, in cash, on the number of vagrants and beggars who visited Dumfries between January 1834 and February 1837, when the system was abandoned, was as follows:—

			£.	s.	d.
1834	No. of vagrants	640 (2½ months no funds)	19	0	0
1835	„	1,120	22	0	0
1836	„	1,610	37	0	0
1837	„	163 (for 1st month).	4	10	0

Average, about 3*l.* each.

“Since February, 1837, *they have been thrown upon the public*, with the exception of about 5*l.* annually paid to them by the Session Treasurer. In 1836 the poor Irish passed through this town, in summer, to the south, in great bands; there were a great many mechanics, &c., connected with the Unions, Secret Societies, Strikes, and Chartists, who were passing and repassing. When these Societies were discovered and broken up, and the operatives again at work—a constabulary force established through the Stewartry of Kirkcudbright and Wigton, to suppress vagrancy and mendicity—the Poor Law introduced into Ireland—and the cheapness and facility of communication by steam-vessels, by which the poor Irish can reach Glasgow, Liverpool, &c., much increased—poor Irish families have been in much smaller numbers. Within the last six months, however, vagrants in general (not Irish families) *have very much increased*; but, not coming in contact with them now, having no provision for them, I can offer no opinion as to the cause.”

The number of such vagrants from towns spreading themselves over the country in summer is considered, by some of the inhabitants of country parishes, as compensating for the number of paupers coming from the country who establish themselves in towns. I believe it will be found, however, that but a small proportion of these vagrants are natives of the towns which they make their place of residence during the winter; but the evil thus pressing on the country parishes is only another indication of the redundancy of the population, and of the inefficacy of the present system of management of the poor.

It is hardly necessary to say that it is no answer to this and other statements, shewing a great redundancy of population in Scotland, to observe that many of these persons are of irregular and profligate character, and that their want of employment is to be ascribed to that cause. In many cases this is true, and in many others it is not true; but what concerns us at present is not the characters of the individuals, but the fact of their number being in excess. All lines of industry are well supplied, and there is generally no complaint of lack of hands; but, nevertheless, there is this large number of persons, partly able-bodied, but a greater number partially disabled, whose employment is scanty and precarious. If their characters were better, probably many of them would be more regularly employed; but then, the demand for labour being the same, others would fall out of work and take their places. Whenever the population is redundant, persons of irregular character will have most difficulty in finding employment, and the same is true of those who have any physical defect; but this does not affect the question of the existence of redundancy, and its attendant evils.

Of the actual redundancy of population, of the want of employment, and of the destitute condition of many of the poor in Edinburgh, I have it in my power to give further authentic information, confirming, as I think, all the statements which I formerly laid before the public. This has been obtained by answers to queries circulated by the association lately formed in Edinburgh for inquiry into pauperism, which were addressed to numerous clergymen of different persuasions, to missionaries employed under the direction of the clergy in the poorer parts of the town, to the lay visitors employed by different charitable societies, and

the medical officers of dispensaries. Answers were received only from a small number of these gentlemen, but in all there were 28 answers, and of these an analysis was drawn up by Mr. Forbes. I shall here quote, first, the queries successively; next, the general result of the answers; and lastly, a few individual answers to each query, returned by gentlemen who have had peculiar opportunities, and have taken pains on the subject, and almost all of whose answers apply to different portions of the town, and so illustrate the extent of the evil.

I beg it may be observed that these answers relate to a town in which there are hardly any manufactures, and in general little fluctuation of employment, and to a season, in which the resort of the higher ranks to it was greater than usual, and the winter not unusually severe. I think I need hardly say, that without going into such details, the mere statement of the number of *paupers*, and of the sums expended on them in different parts of Scotland, give no information whatever as to the existing amount of *destitution*, or the efficacy of existing means for its relief.

Q. 1.—Have you seen, during the last or recent winters, many persons and families in a very destitute state?

General Answer.—26 out of 28 answer—"Yes."

The Rev. Dr. Brunton, and *Rev. Mr. Hunter*, of the Tron Church, answer—"Certainly; but much of the population in the most destitute districts is so fluctuating, that no correct numbers can be quoted." *The Rev. Mr. Fraser* states—"Having been in the habit of daily visiting poor families in every part of the city for nearly 15 years, I think I may say that there are many hundreds of families, and many thousands of individuals, in extreme want." *The Rev. Mr. Guthrie*, of the Grey Friars' Church, answers—"Very many, but for the soup kitchen and private charity two winters ago, must have been starved to death. Every day of my visitation of the greater part of my parish, I am distressed by scenes of extreme destitution." *Mr. Dalziel*, Missionary of the High Church, says—"The population of the High Church parish is about 2,500, and of these there are 103 families permanently or occasionally in destitute circumstances." *Mr. McDonald*, being a visitor of the Destitute Sick Society, answers—"I distributed tickets for food to the destitute in February and March, on the north side of the High Street, from Chalmers-close to Anchor-close, and relieved from 80 to 90 families—about 250 persons; of these 32 were widows with children, 29 single women, 15 labourers, and 8 tradesmen, all out of employment." *Mr. Orrack*, a very experienced visitor in another district, (chiefly the Old Church parish) says—"That out of 500 families, he found 80 in a very destitute state." *Mr. F. Wilson*, another lay visitor, answers—"I assisted in distributing the temporary fund raised by subscription for the destitute poor, and relieved 58 families in very destitute circumstances, in Richmond-street, Simon-square, and Cross-causeway" (a district at some distance from any of the others above noticed); "I have no doubt that many in the district were equally destitute, who did not apply, not being aware of the fund."

Q. 2.—Have you seen many whose furniture, bedding, and clothing, had been pawned or sold for subsistence?

General Answer.—22 out of 25 answer—"Yes."

Mr. Dalziel answers—"Almost all the working classes, when destitute, resort to one or other of these expedients, but the greater part of those whom I stated as in destitute circumstances, have little or nothing, either of furniture or clothing, to pawn or sell." This is the condition of 103 families out of 2,500 people. *Mr. M'Donald* answers—"I have seen a miserable destitution of the furniture and clothing, and was frequently told they had been disposed of for subsistence, and in many cases have no doubt it was true." *Mr. Wilson* answers—"In 14 of the above cases, the houses were *entirely without either furniture or bedding*, most of them said to be sold for subsistence, and many more I ascertained to have sold part of their furniture to procure the means of subsistence." The following striking answer is given by the *Rev. Mr. Guthrie*—"I know of many such cases; the miserable pittance which they receive from the public funds leaves them no choice; they must pawn their furniture in many cases, and beg or starve. The result is deplorable. Their Sunday clothes are pawned, the house of God is neglected, character is lost, low habits are contracted, and step by step those who were once decent, sober, church-going people, sink down into the lowest stage of sin and suffering." *Dr. Wood*, nine years a medical officer of the New Town Dispensary, says—"I have visited rooms destitute of every article of furniture, where there was only a little straw for bedding, and hardly sufficient bed-clothes for decency. Very often, during sickness or temporary want of employment, body-clothes are pawned, the want of which when they recover, or when employment offers, prevents them from accepting it. I often meet with persons who for want of proper clothing are ashamed to go to the infirmary." *Dr. Paterson*, being in the same institution, but employed in another part of the town, says—"I visit many who have no furniture and no bed, but some straw laid on the floor, and whose clothing is most scanty." *Mr. M'Intosh*, of the Destitute Sick Society, says—"I have visited families, who, before they applied to any charitable institution, had disposed of almost all their clothing and furniture."

Q. 3.—Have you seen many whose food was scanty and precarious?

General Answer.—27 out of 28 answer—"Yes."

Drs. Brunton and Hunter answer—"Very many." *Mr. Dalziel* answers—"The single women and widows in general have a scanty and precarious supply of food, and so have the labourers and artisans when out of work; occasionally, however, the two latter, when industrious and well-doing, get credit to a certain amount, which lessens their difficulties, and carries them through." *Mr. M'Donald* answers—"All the cases referred to above; in answer to Query 2 (250 persons), were of that description." *Mr. Wilson* answers—"During the winter months I found all of the above cases very much so; the food of such aged or infirm persons as are dependent on parochial relief, is permanently scanty in the extreme; indeed, those who do not receive additional aid from private benevolence are scarcely one remove from absolute starvation—and there are many such." *The Rev. Mr. Guthrie* answers—"Scores; there are many very decent old men and women, and widows with families, whose food for the greater part of the year is scanty. I know of cases where persons have attended both forenoon and afternoon services on a Sabbath day, without having broken their fast."

Mr. Lorimer, twenty years an Elder and Visitor of the Destitute Sick Society in the West Port District (West Church parish), says—"I have seen a *very great number* of individuals and families nearly starving, and who, but for the Destitute Sick Society and other charities, must certainly have done so." *Mr. Lindsay* states—"That he had seen a number of individuals and families nearly starving, many of them very decent people." *Dr. Paterson* and *Dr. Wood* both state—"That they had visited many whose diseases might strictly be termed 'want of proper support.'"

Q. 4.—It being commonly believed that most of these destitute families are intemperate, have you seen a considerable number whom you had no reason to consider peculiarly so?

General Answer.—20 out of 26 answer—"Yes."

Mr. Dalziel answers—"The number of destitute families reported by me who are intemperate in their habits is 49, and of those who are not, 53. *Mr. M'Donald* answers—"From long experience as a visitor of the Destitute Sick Society, I would say, that although it is not the immediate cause, intemperance brings about much of the existing misery, but not the greater part, for the most numerous cases are widows with young children, in very many instances having only the parish allowance, which seldom exceeds 5*d.* or 6*d.* a-week for each individual. In many recent visits, I did not meet with any case of intemperance among those relieved, although there were several of whose habits I was suspicious." *Mr. Wilson* answers—"With very few exceptions, these cases of destitution arose from circumstances over which they had no control, and not from intemperance, such as want of employment, old age, infirmity, widows with young children, and wives deserted by their husbands." *Rev. Mr. Guthrie* says—"By far the larger number of the destitute families known to me are intemperate, still there are many cases of extreme suffering in those not chargeable with intemperance." The *Rev. Mr. Fraser* says—"I believe that intemperance prevails to a very high degree among those destitute families, but I have reason to know that there are many exceptions. There are thousands, I believe, of aged persons, some decrepid, some blind, others tortured with disease, who are perfectly sober." *Mr. Orrack* says—"I believe, in the majority of cases in my district, the destitution arises from other causes than intemperance." *Mr. Miller* (Missionary) says—"Of 17 very destitute families, 5 only were found to be intemperate." *Mr. McIntosh* says—"The intemperate are generally the most numerous, but I meet with cases suffering much from pressing want, who were very sober people." *Mr. Lindsay* says—"I have seen a considerable number whose destitution I have reason to believe did not arise from their being peculiarly intemperate." *Dr. Wood* reports—"I have seen a considerable number whose destitution was altogether independent of intemperance, arising from want of employment, inability to work from sickness, or suspension of work from severe weather."

Q. 5.—Are there many labourers with families out of work during some months of the year?

General Answer.—23 out of 24 answer—"Yes."

Mr. Dalziel answers—"There are 16 labourers (in the 103 families) who are occasionally out of work. Their destitution, however, does

not generally arise so much from being out of work for months together, as from getting but partial employment." *Rev. Mr. Fraser*—"I have met with many at all seasons of the year." *Mr. M'Donald* answers—"The numbers given in Answer to Query 1, above 89 families, may be taken as a specimen only of the unemployed in the district; many new applications were made from persons out of work, after the fund was exhausted; those cases were therefore not taken down." *Mr. Wilson* answers—"Nearly a fourth of the cases of destitution I saw were of persons or families generally out of employment for three or four of the winter months; those are the most utterly destitute class of poor, having no source or fund to apply to for relief." *Mr. Lindsay* says—"A very great number are willing to work, but unable to procure it."

Q. 6.—Is this the case also with many artisans?

General Answer.—18 out of 19 answer—"Yes."

Mr. Dalziel answers—"There are 37 (of 103 families) occasionally out of employment; painters are generally so several months of winter, and of tailors the greater part have only half employment." *Mr. M'Intosh*—"I met with cases of every trade in this condition." *Mr. Wilson* answers—"Among the cases I saw were 2 shawl-weavers, a book-binder, and a slater, all of decent, steady character; one of these families, consisting of man, wife, and 6 children, to my knowledge received no other aid for many weeks than from this fund, and it was given in meal, potatoes, and coals, at the rate of 3s. per week."

Q. 7.—Also, with many single women, or widows with families?

General Answer.—23 out of 25 answer—"Yes."

Drs. Brunton and Hunter answer, "With many of both these classes, even when willing to work." *Mr. Dalziel* answers—"There are 49 single women and widows, with or without families, in destitute circumstances, some of whom have only a day's work in the week, some none for weeks together, and some none at all." *The Rev. Mr. Marshall* says—"It is very difficult to get employment for females in Edinburgh, and such means of occupation as exist are greatly overstocked; I have often found single women and widows with families, of good character, in circumstances of great destitution." *The Rev. Mr. Guthrie* says—"There is at all times during winter a great deficiency of work for single women and women who had been in service." *The Rev. Mr. Fraser* says—"The misery experienced by widows with families is truly heart-rending, particularly when they are, as is frequently the case, of decent moral character." *Mr. Orrack* says—"Many females are employed at out-door work, which totally ceases in winter; and the small wages they receive prevent their saving anything. This is the cause of much destitution." *Mr. Lorimer, Mr. Lindsay, Mr. M'Intosh, Dr. Wood and Dr. Paterson*, give similar evidence. *Captain Thomson*, of the House of Refuge, says—"Women who work in gardens and fields are a most pitiable class; their wages, when employed, never exceed 9d. a-day; for months, in winter, they have no means of earning subsistence but as beggars." *Mr. Wilson* answers—"Many cases of single women working in the fields when they can get labour, who during the winter months are in entire destitution; there are also several widows with families, but they receive small parochial aid for their children; this pittance, however, is scarcely sufficient to keep them in subsistence even when employed."

Q. 8.—Are there many instances of several women or families associated together in single small rooms to lessen rents?

General Answer.—13 out of 15 answer—"Yes."

Drs. Brunton and Hunter answer—"Very many." *Mr. M'Donald* answers—"Three, frequently." On this point *Mr. Taylor*, Surgeon in the Grass Market, gives more specific information: he says—"I have seen this to a very considerable extent; in some of the lodging-houses not less than 30 people in one room—men, women, and children." *Dr. Wood* has seen "Very many such instances—men, women, and children huddled together in a small room; and, in some cases, asses, swine, and poultry associated with human beings in the same small rooms." *The Rev. Mr. Guthrie* has known a "very considerable number of such cases;" and *Mr. Simpson* understands "that, in some houses in the parish, the wretched inmates are huddled together to an incredible extent."

Q. 9.—What are the ordinary profits for women of the lowest rank when employed?

General Answer.—Seven answer—3s., or less, per week.

Drs. Brunton and Hunter answer—"Very various, probably not exceeding, on an average, 6d. per day, and extremely precarious in duration." *Mr. Dalziel* answers—"4d. or 5d. a-day by knitting, 8d. or 1s. by sewing, and 1s. with victuals by washing." *Mr. M'Donald* answers—"For common needlework, or out-door employment, the average profits are from 6d. to 8d., but these employments are very precarious; these women have seldom employment more than three or four days in the week, and are often for many weeks without any."

Q. 10.—Are these employments generally overstocked in Edinburgh?

General Answer.—18 out of 19 answer—"Yes."

Drs. Brunton and Hunter answer—"Very greatly." *Mr. M'Donald* answers—"Quite overstocked."

Q. 11.—Do many of these destitute persons or families receive assistance from their parishes?

Drs. Brunton and Hunter answer—"Yes; but the allowances are utterly inadequate to their maintenance." *Mr. Guthrie* says—"The allowances are in most cases miserably deficient." *Mr. Lindsay* and *Mr. Lorimer*—"Widows with families have in general a pittance, barely sufficient to support life, without consideration of rent or clothing." *Mr. Orrack*—"A number receive this; but the sum is so small that it barely pays their rent." *Mr. Dalziel* answers—"29 families (out of 103 destitute) receive such assistance." *Mr. Miller*—"Only one out of 17 destitute families."

On this point more specific information will be given afterwards.

Q. 12.—Are many living in Edinburgh entitled to assistance from other towns or country parishes, but not obtaining or claiming it?

General Answer.—Nine answer—"Yes."

Drs. Brunton and Hunter answer—"There is no doubt there are." *Mr. McIntosh* says—"In country parishes very little is done for the poor; consequently, a great number resort to Edinburgh, and get upon the charitable institutions till they obtain a parish right."

I have already stated the result of my own experience on this point.

Q. 13.—Are there many families or individuals now chargeable in Edinburgh who are only recently from other parts?

General Answer.—Seven answer—“Yes.”

Q. 14.—Do you consider the increased number of applications to public charities of late years to be owing to a real increase of destitution, or to the benefits of the societies being extended to many not so destitute as those formerly relieved?

General Answer.—Seven answer—“Increase of destitution.”

Mr. M. Donald answers—“My decided impression is, that poverty and destitution have considerably increased in that quarter since my former acquaintance with it five or six years ago.”

The most important fact in reference to this query is that furnished by the Reports of the Managers of the Infirmary, particularly for 1838, by which it appears that, while the number of admissions have more than doubled within 25 years, the mortality has gradually increased from 1 in 21 to 1 in 8; which implies that the numbers of sick and destitute persons had increased in a much greater proportion than the number of admissions to the Infirmary, and that, either by means of the dispensaries and other institutions out of doors, or by the scrutiny of the medical men in the Infirmary, a *selection* of the most urgent cases only for admission to the Infirmary had been going on. Another equally conclusive fact is drawn from the recent resolution of the Destitute Sick Society to exclude, as a general rule, from their charity, all who inhabit lodging-houses, because the increase of applications made to them (increasing from 3,200 to above 10,500 annually, within 22 years) made it necessary to draw the line somewhere, and they thought that in this way they would exclude the least deserving. By this rule, however, many sick persons in extreme misery, unable to procure clothing to enable them to go to the Infirmary, are absolutely excluded from all but casual and precarious voluntary charity.

Q. 15.—Do you know of many poor persons, who have been resident three years or more in Edinburgh, but are yet unable to claim parochial relief, from want of landlords' receipts, or other causes?

General Answer.—Five answer—“Yes.”

Drs. Brunton and Hunter answer—“From the way in which many of the most destitute are huddled together in one house, nay, in one apartment, such cases must be very numerous.” *Mr. Lorimer* answers—“I meet with many such cases, as it is a most difficult thing to get on the poor's roll without these receipts.” *Mr. Lindsay*—“I have known some, and heard of many more. It is quite notorious that it is very difficult to get on the poor's roll.”

This question I can answer more decidedly, from my own experience, having drawn up a list of above 40 very destitute families, who, as I am assured, have been refused, and certainly have not obtained, parochial relief in Edinburgh, although certainly resident in it more than three years. The legality of such refusal may be questioned; but, as long as there is practically no appeal from the decisions of the kirk-sessions, or other managers of the legal relief in Scotland, I must say, with all deference to those authorities, that I believe such cases will be very frequent.

I can add here a few documents, giving a nearer insight into the condition of the poorest class of the inhabitants of Edinburgh, and some other Scottish towns, and which every one, who has attended to the

condition of the poor in Ireland, will, I think, acknowledge to be a near approximation to the lamentable state of destitution there seen. I quoted elsewhere the instructive analysis made by Mr. Chambers of the poverty of a single small town in Scotland, where it appeared that, in a population of about 2,000 persons, there are only 38 admitted as out-door paupers, with allowances, in general, of about half what is necessary to support a bare existence; but that the number of persons in a state, some of almost constant, others of occasional, necessity, is fully 200, or 10 per cent. of the population; that all the female field-labourers, who are just supported by their wages during the summer and autumn, are dependent on charity of one kind or another during the rest of the year, although they are allowed nothing from the parish; and, lastly, that nearly a fourth of the population are reduced to such straits during a severe winter as to ask and receive assistance from a public subscription.

Availing myself of the kind assistance of Mr. Westwater, Teacher in the Grey Friars' parish, and of Mr. Dalziel, Missionary in the High Church parish, I have had two small districts in Edinburgh investigated, nearly on the same plan as that adopted by Mr. Chambers. The first of these consists of two small closes in the Cowgate (Cowan's and West Campbell's), well known to the Rev. Mr. Guthrie, of the Grey Friars' parish, as well as to myself, and which we agreed on as a fair specimen of the poverty of Edinburgh; in which the people are all of the lowest class, but, in general, of tolerably regular habits, and less migratory than in many of the poorest districts. The number of families in these closes whose cases were carefully inquired into by Mr. Westwater is 48, comprising 158 persons; and I am certain that I do not exaggerate in stating that, in the Ancient Royalty of Edinburgh (comprising 55,000 inhabitants), more than 50 districts may be found, of equal extent, containing a population equally destitute, of which this may be taken as a specimen, as well as many other districts, one of which will be noticed in the sequel, of which a part of the inhabitants are in a similar state of destitution. Of the whole 48 families there are only 10, of whom the working members have regular employment, and, of these 10, there are 2 whose profits are stated at only 2s. 6d. and 3s. a-week. The remaining 38 are stated as being out of employment from two to ten months in the year, 12 of them six months, or more. Of the 38 there are only 12 whose earnings, *when employed*, are stated at 6s. a-week, or from that to 12s.; and, of the remaining 26, there are 16 whose earnings, when employed, are stated at 3s. a-week, or less. When it is considered that hardly any of the families, whose earnings are thus scanty and precarious, can have their rooms at less than 6d. a-week, and that they are prevented by a strict police from public begging, and even from carrying baskets of goods so small as to appear to be pretexts for begging, some idea may be formed of the privations as to food, clothing, furniture, and fuel, which they have habitually to endure; and it is not surprising that the clothing and furniture of most of them should be marked as "bad," "very bad," or "very scanty," and that 16 of them should be noted as having either no bed, or no bed-clothes. Nor is it surprising, when we remember their scanty earnings, that very few of these families, not more than 4 or 5, should be noted as of intemperate habits.

Now among these 48 families the whole regular parochial allowance

is 6s. a-week, divided among 6 of the families, and the only other assistance from the parochial funds, of which I find a record, is, that one widow had 3s. during the last illness of her husband, and that another had a child buried at the expense of the parish. I believe that, in this district, the parochial relief given is accidentally less than in many others; but it will be remembered that, among 120 families in a very destitute state, known to Mr. Dalziel and Mr. Miller, City Missionaries, only 30 had any parish assistance, and that the assistance when given is, as stated by Drs. Brunton and Hunter, "altogether inadequate to their support." The expressions used by Dr. Wood on this subject, in his Answers to the Queries above quoted, are hardly too strong:—"In the great mass of cases of destitution *there is no parish assistance*. In fact, very many of the most destitute are assisted, sometimes altogether supported, by the charity of those who are mostly as destitute as themselves. *This I see constantly*, and, while it has led me to admire the kindly Christian feeling which has dictated such conduct, it has struck me that the means of support for the very destitute ought not to be subtracted from the very scanty means of subsistence possessed by others nearly as poor." Nor is this deficiency of legal relief compensated by assistance from their own relations. Such assistance, among these very destitute persons, is, in fact, so far as I can learn from pretty frequent inquiries, less frequently given, or expected, than among almost any other class of people. In only three of these cases did Mr. Westwater find that any regular assistance from relatives, not living in the family, was obtained.

Again, Mr. Dalziel carefully examined the condition of the people in Carrubber's-close, a part of the Old Town, which I should say is unusually free from the indications of destitution, being generally inhabited by respectable and well-employed artisans. Here he found, however, out of 76 families, 19, comprising 46 persons, in a destitute state. None of these had regular employment; 5 only, when employed, had from 10s. to 16s. a-week; these were out of work from four to six months in the year; of the remaining 14, only 5, when employed, have more than 3s. a-week, and all these are fully one-third of the year unemployed; 9 families, when employed, have 3s. a-week, or less; 3 of them have, absolutely, no employment. Of the 19 families, 11 are noted as of good character, and only 6 as bad, or dissipated. The clothing, furniture, and bedding, are described as most generally "poor, or very poor." The parochial aid distributed among these 19 families is less than 4s. a-week; 3 of them have 1s. a-week each from the Societies for Indigent Old Men and Women; several more have a little assistance from the clergyman of the parish; and *only one is noted as having any assistance from relations*.

Now when to these details, shewing the great *excess of the destitution in Edinburgh over the existing legal provision for its relief*, I add the fact, that the number receiving the legal relief is nevertheless so great as to make the assessment for the poor in the Ancient Royalty (to which all these facts apply), after deduction of the privileged class, who pay nothing, not less than 3s. 3d. a head on the population, *i. e., nearly as great as in some parts of London, and considerably greater than at Birmingham*, I think I need say no more in order to shew that the redundancy of the population, and all the miseries and moral evils thence resulting, must be peculiarly great in Edinburgh.

Aberdeen.—The following documents from Aberdeen shew as to that town (which has suffered, I believe, of late years as much from fever as Edinburgh, Glasgow, or Dundee,) how far destitution exists, and how far it is adequately met, or even its extent ascertained, by the existing provisions :—

1. Extract from a letter from Mr. Watson, Sheriff Substitute :—“ An inquiry into the state of the poor was lately attempted, but has *completely failed*; the few returns that have been given in are worthless, and I can give no correct estimate of the number of poor *not* receiving parochial aid. I have no doubt that the number is very considerable; and, from a report by one of the City clergy, it appears that the destitution is frightful.”

2. The Rev. Mr. M'Lean, Missionary in the North parish, states (in answer to queries)—“ This parish contains nearly 5,000 people, and should a survey be taken, the proportion of destitute during the winter season will be found *almost incredible*. I have seen not a few, whose furniture, bedding, and clothing, had been pawned or sold, and many to whom the supply of the necessaries of life was so scanty and precarious, that to those in different circumstances it would scarcely seem credible that their existence could be supported. Intemperance is the general bane, but I have seen many whose destitute circumstances could be traced to afflictions and other causes beyond their control; many labourers, and some classes of artisans, are out of work during some months of the year; this is the case also as to many single women, and not unfrequently tempts them to a deplorable course of life. The lowest end of the scale of wages for women is only 10*d.* or 1*s.* a-week. There are *a great many instances* of associations of several women, or families, in the same rooms, to lessen rents.”

Tranent.—The following statement, by Dr. Somerville Alison, laid before the Poor Law Commissioners, shews, that in the little town of Tranent, as compared with Edinburgh, there is probably an equal amount of destitution from unavoidable causes, and a greater amount from intemperance and misconduct.—“ A great amount of destitution of the proper means of subsistence exists here among the collier and day-labouring population, as aggravated as I have ever witnessed in the metropolis; and the proportion of the poor to the rich I believe to be much greater than in Edinburgh. Some are reduced to destitution by dissipation, some by laziness, some by old age, some by accidents or diseases incident to their employment, some by the loss of husbands or fathers, and others by their desertion. There are many old men and women, especially the latter, whose only regular means of subsistence are derived from the parish; the relief is usually 1*s.* a-week, very seldom 2*s.*; such persons would inevitably die of starvation, or perish through exposure, did not benevolent persons and neighbours, *generally working people*, assist them with money and food. By such casual aid, the struggle against premature death is maintained. The old men so situated are generally decayed labourers and journeymen tradesmen, and *I am not aware that any frugal habits could enable them to avoid comparative want in their old age*. The women are widows and unmarried women, who have been unable to save any part of their earnings, and by reason of old age are unable to provide for their subsistence. Many colliers are

reduced by disease or accident incidental to their occupation ; but so urgent is their distress that many of them, even in this frail state, go out to the colliery and do a little work. *I have known men so situated work occasionally to within a day or two of their death ;* and have little doubt the lives of many are thus shortened. A collier so reduced, unless he is very ill indeed, gets no relief from the parish. These poor men generally die at an early age, and leave families totally unprovided for, and the privations consequent on this event may be easily conceived from what has been stated. The men belonging to Penceithland colliery are superior to most others in sobriety and cleanliness, but they die in general at a very early age. The average age of the heads of 35 such families is only 34 years. Many of the male heads of these families are in bad health, suffering from cough, difficult breathing, and emaciation. In these 35 families of colliers there are 10 widows ; and where it is usual for one-third of the young families to be deprived of their fathers, there must be great suffering, and much occasion for some liberal and permanent relief. But so importunate are the destitute in other quarters that these people are not thought to be in distress, have no exertions made in their behalf, and receive little or no parish assistance. *I do not think more than 5s. a-week of parish money is spent on all these 35 families."*

Dumfries.—In the town of Dumfries, the proportion of the inhabitants admitted either as permanent or casual paupers is stated as higher than in any other part of Scotland. At present more than 10 per cent. of the population are in that condition ; the permanent paupers and their families are 544, who receive 1,150*l.* ; and the casual paupers of a year, 700, who receive 126*l.* : total 1,244 persons in a population of 11,600. But the following extract from a letter from Mr. Gemmell, Manager of the Poor, will shew that even here the number of destitute and dependent poor greatly exceeds the number of paupers.—“ From my partial inquiry made last week I find that there are not less than 250 poor tradesmen, labourers, and women, heads of families, who are only partly employed during the year, but receive no assistance from the public in any shape. For example, tailors have not more than eight months’ work in the year, average wages, when employed, 12*s.* to 14*s.* a-week ; labourers not more than eight months, average wages, when employed, 9*s.* ; stocking-weavers, average wages 6*s.* to 7*s.* per week, clear of all deduction. These are now more fully employed than formerly, many having left this for other places. Hand-loom cotton-weavers are better employed now than they were, but may be reckoned to be one month idle during the year, and their average wages are not more than 3*s.* to 3*s.* 6*d.* per week, after deducting loom rent, fitting, &c. There are about 250 such weavers in Dumfries at present, few of whom are in the receipt even of casual relief ; and how they fare, with families, on that very small earning God only knows ; masons have employment only eight months in the year, but at good wages.” “ I consider the 350 families, or 700 individuals, returned by the session treasurer as casual paupers, as destitute poor, dependent on charitable assistance of some kind or other during the year, although not regular paupers, and to these I would be inclined to add at least 250 more families who must suffer great privation during winter from want of employment. Thus the regular paupers being 544, or 4·7 (nearly) of the population of 1831, the whole destitute poor, dependent during

part of the year on some kind of charitable assistance, are 1,200 more, *i. e.*, 1,744, or rather more than 15 per cent." He adds—"I have intentionally kept rather within the numbers, that I may not appear to exaggerate in answer to this question."

To the same purpose Dr. McLellan, of Dumfries, states—"During the last three winters, I have seen many individuals and families in a destitute state, or enduring different degrees of privation. Very few of these were on the poor's roll, though some of them received occasionally 1s. or 2s. from the collections at the church doors, which, being of a small amount, proved quite inadequate to meet the cases requiring relief. I have not seen many whose destitution could be ascribed to intemperance, but many, particularly Irish labourers, who in winter have little or no employment. The food of many is scanty and precarious, and many diseases, particularly of children, are induced, as I have reason to believe, in a great measure by scanty and improper food. In 1838 there was a severe visitation of fever, chiefly confined to the poor, and their privations in regard to food were doubtless an influential cause of its extension and long continuance."

St. Andrew's.—The following extracts from a report from St. Andrew's, containing the result of an inquiry into the condition of the poor there, made by a Committee consisting of the provost and three members of council, Sir David Brewster, the episcopal and two dissenting ministers, and several other gentlemen, and *unanimously approved by the town council*, shews a state of matters there very similar to what I have represented as existing in other towns in Scotland, and this is the more important, as Mr. Monypenny (late Lord Pitmilly) is a heritor of the parish of St. Andrew's, and the system there established may be presumed to be that which meets his approbation.—"There is no assessment levied for the poor, they are entirely supported by the church-door collections, the contribution of the Ladies' Society, &c. &c., and occasionally the voluntary contribution of the inhabitants. The total amount of funds distributed in the two parishes is 414*l.* (being 1*s.* 3*d.* a head on the population). In St. Andrew's, as in most other parishes of Scotland, the parochial guardians of the poor seem to have regarded pauperism as *a disease which they were bound to keep down* by every means in their power, and with this view they have reduced both the number of paupers admitted on the roll, and the amount of allowance, to the smallest possible limits. The average number of paupers on the permanent roll, in the parish of St. Andrew's, is 87; in the parish of St. Leonard's, 14; and the average number in the former, receiving occasional relief, is 34." The regular paupers therefore are 1·6 per cent. of the population, and the whole number receiving parish assistance are 2·1 per cent. "The amount of relief given to those on the permanent roll (exclusive of lunatics,) varies from 2*s.* 6*d.* to 6*d.* a-week. Four persons receive 9*d.*, four 6*d.* a-week, and 49, or more than one-half of the whole number, 1*s.* per week. *From this sum they require to provide themselves with food, clothing, fuel, and lodging.* A certain portion of them receive a quartern loaf from the Ladies' Society in winter, and a half-quartern loaf in summer. A few coals also are occasionally distributed among them. Even with this assistance it must be evident that the sum allowed them is not one-half of what is needed to support a bare existence, and the

allowance they receive can be regarded as nothing else than *a system of protracted starvation*. A considerable portion of those on the pauper roll are aged single women, whose gains, when they were able to work, amounted to only 8d. a-day, and were therefore barely sufficient to support and clothe them. They have rarely any relations who can give them any assistance, and are consequently left destitute in their old age. The allowance granted to paupers of this class rarely exceeds 1s. per week, and is sometimes only half of that sum. *One or two scanty meals of porridge or potatoes, with now and then a little tea or thin broth, form the diet of a day with most of these people; and their feeble attenuated appearance bears sufficient testimony to the inadequate manner in which they are supplied with the necessaries of life.*

“The rents paid by these poor persons are exorbitant, and press very heavily upon them; they average about 34s. for one small room. The average rent of those on the permanent pauper roll is 26s. As might be expected, the rents are not well paid, and many are in arrears for three or four years. In a very few instances the rent is paid by some benevolent individuals.

“In only a few cases, *less than one-fifth of the whole, do these persons receive the slightest assistance from their relatives*. With respect to the 34 individuals who are represented as receiving occasional relief, their circumstances are so necessitous as to render them fit objects for *permanent* assistance. And, besides those to whom this pittance is doled out, there are a considerable number of needy persons in this parish who receive no public allowance, and are therefore dependent for support entirely on voluntary charity (a list of 50 of these persons is subjoined). There are *numbers* also who are occasionally employed, but at a rate of wages so low as barely to support and clothe them. Whenever they are thrown out of employment, which not unfrequently happens, they are *entirely destitute*. The parish does little or nothing for them, and, but for the assistance of their neighbours who are a little better off than themselves, *they would starve outright*.

“There is no dispensary in this parish, and no public provision made for supplying the poor with medicines or medical assistance. With the exception of 10s. or 15s. annually disbursed by the session, they are dependent for the supply of medicines on the benevolence of the medical gentlemen of the town. There are six lunatics in the parish of St. Andrew's, for whom no proper provision is made. *Four of these are dangerous, but are, notwithstanding, permitted to go at large.*

“The facts elicited during this inquiry into the state of the poor in St. Andrew's, abundantly prove the *insufficiency and inequality of the system by which the Scottish poor are supported*. The allowance granted them falls miserably short of the sum necessary to support even a bare existence, and *the burden of maintaining them lies to a great extent on the middle classes of society*. If society is bound to support its poor and infirm, and sick members, the burden ought undoubtedly to be borne by all, according to their several abilities; but it is a well known fact, that in general the most able and wealthy are by no means the most charitable members of society; that, in fact, those by whom the poor are for the most part supported, are, comparatively speaking, a small minority, principally composed of the middling classes, and that not a

little assistance is given them by those who are only a little better off than themselves. But since all classes reap the benefits, they are all bound to bear the burdens of society, according to their several abilities, and the only method by which the wealthy can be made to contribute, as a body, to the support of the indigent and the infirm, is by a COM-PULSORY ASSESSMENT."

Perthshire.—In further confirmation of what I have stated as to the extent of poverty, vagrancy, and mendicity, in Scotland, its pernicious effects, and its dependence in many instances on the inefficacy of the existing provisions against destitution, I beg to subjoin an extract from "Some Observations on Vagrancy," drawn up last year by Mr. Barclay, Sheriff Substitute of Perthshire, with which I have been favoured by Mr. Anderson, Sheriff Depute of that county.

"It is assumed that the gentlemen of the county of ———, like those of other counties around, are now fully aware of the great increase of the evil of vagrancy, with its attendant train of crime—an evil which has so steadily progressed as now to excite alarm—*rendering it difficult to reside in the country districts with peace and safety*, not to speak of enjoyment. It is not enough to say, as is often said, that begging, promoted by indiscriminate charity, is the occasion of the evil. This is rather an effect than a cause. The inquirer must go a step beyond and examine the occasion of begging.

"Its remote causes lie deep in the very nature of society, especially of society in its advanced but highly-artificial condition. To suppose that any measure or congeries of measures will ever totally obliterate pauperism (or rather, destitution and dependence on charity,) from the face of society, is to suppose a state of existence not the lot of humanity, and opposed to the Divine word that saith, 'The poor ye shall have always.' To mitigate the evil is all that can be expected, and assuredly the very regularity of its increase where no means have been used to restrain it, and its decrease wherever opposed even by small resistance, shew how much can be done to repress its growth.

"There need be no amazement that the offspring of beggars and vagrants, whose life and manners have been moulded from youth according to the impress of their parents, should belong to the same class, and surpass in crime their instructors. But even the children of parents industrious and moral, may, from neglect and misconduct, sink into the classes which are counted the pests of society. To test this, let inquiry be made, and the result will be found that *by far the great mass of vagrants, at present overrunning the land, were either themselves at one time in far other circumstances, from which their own misconduct or misfortune has driven them, or at least that they are the immediate children of decent and industrious parents, who, in their day, filled the station of humble, though useful, members of society.*

"The *very stinted parochial relief given to those on the Scotch poor's list is an obvious encouragement to beggary.* There is just sufficient aid given to stamp the person as a pauper, and so to destroy his independence. By giving something, however little, the claimant, it is vainly thought, will be appeased; whereas, he is merely added to a class whose clamour is just the louder that their claim to relief is admitted. but their satisfaction is only a mockery. It is avowed, that the pittance is not

meant to give the pauper complete support. He is to supplement it by labour, but then he may not have physical power; or he is to receive the aid of relations, but relations he may have none, or if perchance he has, they need more to receive than to give aid. *Nothing remains but to beg.* The romance of a wandering life gains the mastery over existing local affections; he goes through the neighbouring parishes, he meets with the outcasts of other places, he forms friendships, and often alliances, not meet for the strictest scrutiny. He only comes to his parish on the pay day, to get his pittance, or he indignantly throws it up, and taking the world as his parish, pursues the far more lucrative profession of vagrant. Thus the labourer becomes the parish pauper, and passing through this chrysalis state, comes out the full-formed vagrant.

“Much has been said in praise of the Scotch, and much in dispraise of the English, system of poor laws. It is almost treason against a nation's pride, to whisper that the Scotch system is not perfect. There may be a balance of evils, and assuredly wisdom leads to a selection of the least. In England it may be that the pauper is (or at least *was*) in a situation more enviable than the labourer, and so industry was fast merging into pauperism. In Scotland it may be, that the pauper has only a starving allowance, and therefore, that there pauperism is a synonyme for vagrancy. Perhaps there may be excellencies to be found in both systems, and evils to be avoided. There does appear to be a *fitness and an economy in a workhouse*, to which the able-bodied, but indolent vagrant could be sent.

“It is no argument against the right *use* of a system, that it has been subject to great *abuse*. The parochial authorities of Scotland might usefully inquire whether even a more judicious scrutiny may not be applied to their roll; whether work may not be obtained, in some way or other, for all who can work, and that those who cannot, should be either boarded, or otherwise *fully supported*, with the stern and strictly-enforced (because then and only then the just) penalty of forfeiture of aliment (or rather, forfeiture of liberty,) on detection of an act of mendicancy.

“There is no doubt that indiscriminate charity is the hot-bed wherein pauperism and vagrancy luxuriate. But it is equally vain to attempt to coerce benevolence where it exists, or to make it flow where it has no spring in the heart. Neither penal law, nor moral exhortation, will open the hand of the niggard, or shut up that of the benevolent. It is impossible to forbid charity, and if it were possible, it would be inexpedient. True wisdom will deal with the receivers, and not the givers; and labour to withdraw the unworthy objects of charity, and present only those on whom may fall what doubly blesses.”

It is of the utmost importance, in all discussions regarding the management of the poor in Scotland, to keep in view the great *excess*, thus shewn to exist, of *poverty, destitution, suffering, and dependence*, of large bodies of the people, *over the pauperism that appears on the rolls of the parishes.*

One consequence of that miserable destitution in so many inhabitants of our towns is very important, because it shews the natural tendency of this neglected, or imperfectly relieved, misery to perpetuate itself. I mean the necessary *neglect of education, and of religious, or moral, training, among many of the children.* The following is the account

given of this matter by Mr. Gemmell, Superintendent of the poor in Dumfries. There may, very probably, have been some peculiar neglect in this case, but more or less of such neglect I believe to be inseparable from a system, under which disabled parents and widows are not only continually prevented from bestowing attention on their children, but are very often, and to a great extent, dependent on their labour, or on their gains as vendors of little wares, or, more generally, as beggars: "The orphan and pauper children have been left to live without the fear of God ever being set before their eyes, or even being taught to reverence his holy name, without any system of regular moral training; they might attend school, or not, as they pleased; no inquiry was ever made whether they were doing so, or not; and as to the state of their education, no one ever took the slightest interest, and as little inquiry was made whether they went to church, or had suitable clothing for it. In fact, the only anxiety ever shewn was to get them off the roll, to lessen the expenditure. Thus have the pauper children been reared to become the very pests of society, the nursery of crime, and a perfect hot-bed for breeding more paupers; and, while such a system is persevered in, pauperism, I fear, will never decrease. I found upwards of 300 children, at present, attending no school, and the one-half had never been at school. Many of them, who therefore of course could not read, were 9, 10, and 12, years of age. If, on a slight inquiry, so many were found in this way, we might reasonably expect that a closer examination would shew us many more."

Another consequence of this state of destitution, to which no legal provision is applied, is, likewise, in a practical view, of great importance, because tending to a perpetuation of the evil, viz.,—*the great deficiency of precise, or definite, information as to the extent, or precise nature, of the evil itself.* There has been some boasting of the number of agents employed, under the voluntary system, in distributing relief to the poor; but, in a practical view, the number of agents employed is not the important point. The grand desideratum is a regular and rigid surveillance of that part of the population which is necessarily dependent on the assistance of the rest, in order that their real wants may be known, and their character and conduct be watched; and, if we inquire how far this object is accomplished in any of the large towns, which appear, from what has been stated, to be the great receptacles of the destitution of Scotland, we shall find that, while many agents are employed, each of whom does a little, there are few of the poor whose history, character, or wants, are accurately known to anybody.

Of that great mass of destitution which is not admitted to the legal provision, and which is continually shifting its place, there is no regular, or official, inspection, and no record. The deficiency of information, of any precise character, as to most of the Queries circulated in Edinburgh, was very obvious in the Replies of even the most experienced gentlemen to whom application was made. Mr. Watson's statement on this head, from Aberdeen, has been already quoted. An inquiry was attempted also at Dundee, but proved equally abortive. Mr. Gemmell writes from Dumfries:—"I proposed to a committee, lately, to have an accurate and complete inquiry into the external and internal state of the dwellings of the poor, their employment, earnings, characters, education, &c., to be

assisted by some respectable inhabitants in every district. The only reply I received was, that they doubted if I would get respectable individuals to give their time."

Of the miseries of a redundant population, it is well known that the frequency and fatality of diseases, and especially of epidemic diseases, are among the most distressing. The observation of Malthus I believe to be perfectly just, at least in relation to continued fever, that it is always to be apprehended in an epidemic form when the population considerably exceeds the demand for labour, and the means of comfortable subsistence derived from labour; and I have formerly quoted facts to prove that, in this respect, Edinburgh and Glasgow, as well as other towns in Scotland, have furnished no exception to the general rule. Dr. Cowan has shewn that *the number of cases of fever in Glasgow, in five years ending December 1839, must have been not less than 55,000*, in a population under 300,000, that is, more than one-sixth; and, judging from the number admitted into the hospitals in Edinburgh during the same time (6,875), the number of fever cases in Edinburgh and Leith must have been *nearly 15,000, in a population certainly under 180,000, i. e., not less than one-twelfth of the whole.*

There has been some difference of opinion, and, as I conceive, misapprehension, on this part of the subject, in consequence of the opinion having been espoused—never, I think, by any considerable number of practitioners in Scotland, but by several physicians of high character in London—that the continued fever of this country proceeds from a malaria, chiefly originating in putrescent animal and vegetable substances, and in excretions from the human body, and that it may be extirpated, therefore, by draining, and by careful and constant removal of all such offensive matters. If this opinion were held to be established, it must be admitted that the frequent prevalence, and occasional rapid extension, of continued fever in any town would not be any such indication and test of previous destitution and suffering, as I have elsewhere represented it. In confirmation of this opinion, I see it stated by Dr. Southwood Smith, that all those districts in London which are well furnished with sewers are nearly exempt from fever, and that those where there are no sewers are peculiarly liable to it. This observation does not seem to be without exception, even in London, or other English towns; for it is stated by Mr. Evans, in the Borough, in 1837, that fever was prevalent in the district which he superintended, although the drainage was very good, except in one small portion of it, where fever did not prevail more than in others; and a similar observation is made by Dr. Jenks, in an excellent Report on the Sanatory State of Brighton. But, admitting Dr. Smith's observation to be, in general, just and important, I cannot but think the inference hasty and unfounded, that the matters which ought to be carried off by sewers are the immediate source of the contagious fever. The districts without sewers will, naturally, be not only the dirtiest, but the *cheapest*; they will be inhabited by the poorest and most destitute people, who will be huddled together in the greatest numbers in proportion to the space they occupy; and, especially, they will be the resort of the poor Irish, among whom, wherever they may abide, fever has, for many years past, been at least as firmly rooted as it was in the jails in the time of Howard, and who, practically, derive little

or no benefit from the provision against destitution which exists in England. Of the effect of all these circumstances on the extension of epidemic fever, I apprehend there can be no doubt; and, in connexion with these, I think that the want of sewers ought to be stated as an additional and accessory cause of the extension, but by no means as an ascertained cause, certainly not as the main cause, of the production, or generation, of fever.

It is easy to give quotations from various authors, particularly from Bancroft (on Yellow Fever), Chisholm (in *Edinburgh Medical Journal*, vol. vi.), and Parent Duchatelet (in *Annales d'Hygiène*), to shew on how large a scale, and for what length of time, the effluvia from putrescent animal and vegetable matters and excretions from the human body may be applied to great numbers of people in all climates and seasons, without any such result following as the generation of continued or typhoid fever. The exhumations at the church-yard of St. Innocent's, at Paris, in 1786-7, carried on for two years in all weather, in which an enormous mass of corrupting human bodies were fully exposed to the air, producing a most nauseous smell, and even causing fainting fits in many of the workmen employed, but which, after the fullest inquiry, do not appear to have been attended by any febrile disorders; the very offensive state of the burial-grounds at Seville, in which 20,000 persons had been interred after the yellow fever of 1800, and which was described by M. Berthé, professor at Montpellier, but was not followed by any febrile disease; the habitual combination of filth, foul air, and putrid effluvia, found in the habitations of many nations and in all climates—in the yousts of the Greenlanders and Kamschatkans, and in the slave-ships of the torrid zone, but unattended by any febrile epidemics; the numerous examples of prisons on the Continent of Europe, reported on by Mr. Howard, in which he found on different occasions of visiting them “cells and dungeons as crowded, offensive, and dirty, as any he had observed in this country,” but without finding fever in any of them; the various manufactures or preparations of ammonia, of adipocere, of refined sugar, and dressed leather, described by Dr. Chisholm, in which great numbers of persons are continually exposed to the most offensive effluvia from putrescent animal matter, without ever being affected with fever; the complete immunity from fever enjoyed by the numerous persons employed at Montfaucon near Paris, where many thousand animals are annually slaughtered, and part of their bodies allowed to putrify, where likewise almost the whole filth of Paris is collected and prepared for sale as a manure—are so many proofs, that neither any effluvia from dead animal or vegetable matter, nor excretions from the human body itself, if unaffected by fever, have any power to generate this poison.

I can state, as the result of twenty-five years' observation in all parts of Edinburgh, that, although I have seen fever prevailing some hundreds of times in places where putrid effluvia abound, yet there is *not a single such district*, in which I have ever seen it, which I have not known to be at other times, for several years together, *perfectly free from it, notwithstanding the continued existence of the putrid effluvia*, and even although the disease very frequently was prevailing in the neighbouring streets or closes.

The doctrine, regarding the external causes of continued fever (distinguished of course from the intermittent or remittent fever), which has been adopted almost universally by the Irish physicians, is perfectly in accordance with all that I have ever seen of it, or heard of it, in Edinburgh, or other parts of Scotland, viz, that it may probably sometimes originate spontaneously in the human body itself (particularly under the influence of long-continued mental anxiety and depression) but that its chief, and, in a practical view, its only certain, source is *a specific contagion* arising from the living human body *already affected by it*, which putrid effluvia can no more generate than they can generate small-pox or measles, which is liable to variation in intensity and even in kind, in different seasons, and which is favoured in its effect on healthy persons, by various conditions, properly termed auxiliary or predisponent causes, but which, of themselves, are inadequate to produce the disease.

Now among these auxiliary or predisponent causes, I willingly admit that foul or vitiated air, gradually enfeebling the human constitution, is one of the most powerful; but, in attempting directly to remove this, we not only do not touch the source of the disease, but in the present state of the city of Edinburgh, as I think it easy to shew, we neither attack the most important, nor the most remediable, of its auxiliary causes.

Much has been said of the irrigated meadows in the neighbourhood of the town, but anxious as I am, for the credit, and even for the health in other respects of the inhabitants, to see such a nuisance removed, I must nevertheless express my conviction, that any money expended for that object will be found wholly ineffectual in diminishing the liability of the inhabitants to contagious fever. This opinion is rested on the following grounds:—

1. Any one who has observed the vitiated state of the air of the closes, of the passages and stairs, and more especially of the *rooms* in those parts of the Old Town, in which the poorest of the inhabitants dwell, however strongly impressed he may be with the efficacy of foul air as a cause of the extension of fever, can hardly by possibility think of resorting to the foul air of the marshes, *more than a mile off*; for an explanation of the extension of the disease by this means; or suppose that the draining of these marshes can make any perceptible difference on the atmosphere of the rooms in question.

2. The *parts of the town* in which I have seen the disease extend most rapidly, are by no means those which are nearest to the marshes. The central and most thickly-peopled parts of the town, and the Grass-market and West Port, are those in which it is usually most prevalent; but the principal marshes lie to the eastward of the town, a mile distant from the former district, and at least a mile and a half from the latter; and many intervening districts, and in some instances villages, close upon the marshes, are almost uniformly comparatively exempt from fever.

3. The *season of the year*, in which fever always prevails most extensively in Edinburgh, is the winter and early part of the spring, when the exhalations from the marshes are *less* than in the summer and autumn, and when the wind is very generally from the west (and often very high); when, therefore, the principal marshes are completely *to leeward of the town*, and no exhalations from them can possibly reach it. This observation is indeed a strong argument against any kind of effluvia from dead matter being a main agent in the diffusion of fever.

These two statements are elucidated by the following Tables:—

No. 1.—*Table shewing the Number of Fever Patients furnished by different Districts of the City of Edinburgh.*

Total number of patients affected with fever, admitted into the Edinburgh Royal Infirmary, from 1st July 1839, to 1st July 1840 . . .		} 684; viz.
From <i>First District</i> .—Cross causeway, Cawseyside, and Southern District (Distant from the chief marshes) . . .	54	
<i>Second</i> .—Pleasance, Arthur, Salisbury, Brecon, and Carnegie streets (Intervening between No. 1, and the chief marshes) . . .	18	
<i>Third</i> .—Bristo-street, Potter-row and Lothian-street . .	17	
<i>Fourth</i> .—Candlemaker-row, and south side of Cowgate-down to Pleasance . . .	16	
<i>Fifth</i> .—Cowgate, north side from Grass-market to St. Mary's-wynd (Nos. 4 and 5 equi-distant from the marshes) . . .	104	
<i>Sixth</i> .—Lawn-market, with closes, and Castle-hill . .	26	
<i>Seventh</i> .—High-street, from High Church to Netherbow (Central part of the town) . . .	71	
<i>Eighth</i> .—Canongate, with closes, and backs of Canongate (District nearest the chief marshes) . . .	125	
<i>Ninth</i> .—Grass-market, with closes (Distant from the chief marshes) . . .	25	
<i>Tenth</i> .—West Port, with closes, and Western district . .	31	
<i>Eleventh</i> .—New Town, including Stockbridge, Greenside, Rere-street, Jamaica-street, &c. &c. (For the most part distant from the chief marshes) . . .	61	
<i>Twelfth</i> .—Leith . . .	27	
<i>Thirteenth</i> .—No fixed residence in any particular part of Edinburgh . . .	20	
<i>Fourteenth</i> .—Sent from various parts in the neighbourhood of Edinburgh, principally consisting of labourers engaged in the harvest, and on railways . . .	89	

N. B.—This Table gives only general results; the population of the different districts not having been ascertained. It may be observed that the Grass-market and West Port furnished fewer cases than usual during this period, and the Canongate more. The Canongate district was affected, however, only partially; and at two places in this district, from which many cases have been sent, viz., Douglas-court, Leith-wynd, and Riddle's-court, New-street, I have ascertained that the disease had been *imported*; the first case in one of these having been affected in another part of the town, and in another having been affected in Aberdeen. I consider the unusual number of cases in the Canongate, therefore, as accidental.

No. 2.—*A Tabular View of the Monthly Admissions of Fever Cases into the Edinburgh Infirmary.*

February (9 years to March 1839)	810	averaging 90·0 each year.
March	845	,, 93·8
April	701	,, 77·8
May	749	,, 87·2
June	712	,, 79·2
July	631	,, 70·1
August	678	,, 75·3
September	783	,, 87·0
October	888	,, 98·6
November	1090	,, 121·1
December	1176	,, 130·6
January	1166	,, 129·5

I may add, that twenty years ago, when fever prevailed much in Edinburgh, many of the inhabitants accused a number of dunghills, situated in the immediate vicinity of several of the great roads leading out of the town, in like manner as many of them now accuse the marshes. Several of the medical men then consulted gave a decided opinion, on similar grounds to those which I am now stating as to the marshes, to the effect that although the removal of the dunghills, as a nuisance, was proper, yet no perceptible effect, as to the liability of the inhabitants to fever, was to be expected from that measure. The dunghills were removed, but twice since that time, viz., between 1826 and 1828, and between 1837 and 1839, epidemic fever has spread in Edinburgh even more extensively than it had ever done before.

It is certain, however, that in the interior of the city, there is a great deal of filth external to the houses, depending partly on the imperfect state of the sewers, and the want of proper receptacles in the narrow closes where the houses are piled above one another in lofty *lands*, and partly on the great collections of manure which the proprietors of stables and cow-houses are allowed to make for their own convenience, in closes which are inhabited by numerous poor families. I have stated to the Poor Law Commissioners that it would be very desirable for the health of the city, if legislative measures could be employed to redress these grievances, which would require the prohibition in future, of houses being erected of more than a certain height, in proportion to the intervening alleys or closes between them, and would require also the prohibition of such depôts of manure, although private property, being made in the immediate neighbourhood of inhabited houses. I am happy to see that these or similar measures are recommended by the Committee of the House of Commons who have reported on the health of great towns. But I apprehend that both these measures would be expensive, and the former could not be really effectual for a considerable length of time.

But even if these measures were adopted, I think we cannot anticipate that by any such means, without a *permanent improvement of the condition of the poorest inhabitants of the city*, the liability to continued fever can be materially diminished. And for this opinion I beg to state the following reasons:—

1. The city has undergone, within my recollection, a very considerable improvement in point of cleanliness and ventilation, so far as the streets and everything exterior to the houses are concerned. The service of the scavengers is much better performed than formerly; the dunghills formerly mentioned on the outskirts of the town have been removed; a deep and spacious covered drain has been made along the Cowgate, and many of the crowded and ill-ventilated buildings, in which I have known fever to spread epidemically, have been removed, and either better houses substituted or wide openings left. Thus the greater part of the south side of the Castle-hill and West-bow, the whole of Libberton's-wynd, the greater part of Forster's-wynd and Ball's-wynd, and of several closes in the Cowgate, have been pulled down; and several of the oldest and most filthy large tenements in the High-street, in Blackfriars'-wynd, in High School-close, Canongate, &c., have been nearly deserted. But there has been no corresponding improvement in the health of the city; the inhabitants of such places have merely crowded into other parts of

the town, where their habits and mode of life continue as before, and their numbers are, I believe, increased; and within the last three years (previous to which time most of these improvements had been effected) epidemic fever has been both more extensive and more fatal than at any former time.

2. I have had many opportunities of observing that, among the most destitute of the people in Edinburgh, fever often spreads rapidly in situations as well ventilated and as far removed from any filth, *external to the inhabited rooms*, as can be desired. For example, in the *highest* stories of some of the loftiest houses in the vicinity of the High-street (particularly at Covenant-close, Dickson's-close, Skinner's-close, and James's-court,) I have seen numerous and rapid successions of fever cases originating from individual patients; while even at the same time, in the *lower parts* of the same common stairs, *worse ventilated*, and *nearer to the collections of filth* to be found in the closes, but which are inhabited by people better employed and in more comfortable circumstances, *fever has not appeared*.

In two instances which have come under my observation very lately (at the foot of the old Fishmarket-close, Cowgate, and in Douglas'-court, Leith-wynd,) fever had affected many individuals in the upper stories of lofty tenements, while the inhabitants of the lower stories, being generally in better circumstances, although in the close vicinity of very filthy courts or passages, have escaped entirely.

From many such observations I infer that the filth which really most effectually favours the extension of fever, at least in this city, is that which exists *within the inhabited rooms* in many parts of the town, and which is *inseparable from that destitute mode of life* which many of the lowest of the inhabitants, particularly during winter, habitually lead.

The question was put to me, in very distinct terms, by the Poor Law Commissioners, whether I considered the destitution without the filth, or the filth without the destitution, to be more effectual in the production or extension of fever; but it is one which, I am afraid, hardly admits of a direct answer, because, in Scotland at least, we have no destitution without filth. But we have many examples of filth without destitution; *i.e.*, of families living in close ill-aired rooms, of dirty habits, but regularly employed, and suffering no peculiar privations; and although we often see fever affecting several members of such families in succession, yet I can say with confidence, from many such cases as those I have just mentioned, that fever neither makes its way into such families with the same facility, nor extends through them with the same rapidity and certainty, as in the case of the unemployed, or partially employed, disabled and destitute poor.

That the *destitution*, and the irregular mode of life connected with the destitution, of many of the lower ranks in this, as in others of the great towns in Scotland, are the chief cause of the frequent diffusion of epidemic fever in them; and that merely owing to the filth which is always found in connexion with such a mode of life, I conclude from the following considerations:—

1. It is a general principle in pathology, established by the general experience of medical men in all ages, in civil life as well as in military or naval service, that contagion, and indeed every other cause of acute

disease, acts most rapidly and most certainly on the human body when enfeebled by deficient nourishment, by insufficient protection against cold, by mental depression, by occasional intemperance, and by crowding in small ill-aired rooms; all of which are the constant concomitants, as I believe the inevitable effects, of destitution in the poorer inhabitants of this and other great towns.

2. It has been very generally observed, on a large scale, in the history of contagious fever, that it has spread most rapidly and extensively, and assumed the form of an epidemic, in circumstances where most or all of those conditions have been present; for example, after scarcities; after the sudden cessation of the employment for numerous labourers; in exhausted, impoverished, or beaten armies; in besieged towns, &c. Some examples of this kind were given in my former work.

3. This has been more especially the result of very numerous and careful observations made in Ireland on epidemic fevers precisely similar to those lately prevalent in Scotland, and from which, in fact, very many of the cases occurring in Scotland during the present century have obviously originated.

The experience of the physicians in all parts of Ireland, in the great epidemic which began in 1817, was collected and digested by the eminent men appointed by Government for that purpose, and commented on by others; and the peculiar efficacy of *want and misery* in causing the extension of the disease, seems to have been observed and admitted by every one of the practitioners, and confirmed by the inquiries of every one of the reporters to Government, and other authors who have written on that epidemic; and the only question on which these authors appear to differ is, as to whether want and misery are sufficient to engender the disease, or only to give efficacy to the specific contagion.

The following are the statements of the late Dr. Cheyne, first as to the results of his own observations in Dublin, and afterwards as to those of the reports he had received and the inquiries he had made through the whole province of Leinster:—

“Where the disease was introduced amongst such communities of the poor as had little connexion with the higher ranks of society, and were *destitute of employment, and consequently ill supplied with food, and clothing, and fuel*, among such as, from the severe pressure of the times, were *so dispirited* as to be indifferent to the danger of infection, *it spread with celerity, and pertinaciously maintained its influence.*”

“The state of the poor when the epidemic appeared was *worse than it had at any former time been known*, in consequence of a succession of unfavourable seasons. In Wexford, at the period of my inspection, it was still very miserable. In some places *not one-half of the labouring poor had employment*; many of the farmers had discharged all the labourers they were wont to employ; and few, if any, retained the usual number. *Turf in most places was uncommonly dear*; the clothes of the poor were *nearly worn out*, and many of them slept in their body-clothes for want of blankets. *Thus depressed in strength and spirits, they were thrown open to the disease*, which everywhere existed among them, and which it was generally thought was propagated not merely from one neighbour to another, but by the *swarms of beggars* who overran the country. From Dublin to Gorey I heard complaints

of the injury which the country had sustained from the beggars, who were banished from Dublin last year by the Mendicity Association. Many of these wanderers laboured under fever, and others probably conveyed contagion from house to house in their clothes. The disease *has been most destructive in those parts of the country where the poor have had least intercourse with the rich.*"*

The following statement is made by one of those authors on the Irish epidemic fevers, who has expressed himself most strongly (and on good grounds) against the idea of destitution being the sole cause of fever:—

"The author is far from denying the *powerful agency of want and misery* in diffusing epidemic fevers; he has ever regarded those evils, in conjunction with certain moral habits, which he looks upon as *their natural and inevitable consequences, to be the chief, the great, he would say it emphatically, predisposing causes of fever in this country.* The existing causes act with tenfold effect on an impoverished and enfeebled multitude."†

I shall only add the emphatic expressions of Dr. Grattan, one of the physicians who had seen the most, and given the most accurate description, of the fevers in Dublin.—"Next to contagion I consider a *distressed state of the general population of any district* the most common and most extensive source of typhoid fever. The present epidemic in Ireland is principally to be referred to the miserable condition of the poorer classes in this kingdom; and so long as this state shall continue unimproved, so long will fever prevail, probably not to its present extent (1818), but certainly to an extent sufficient to render it a national affliction."

Now although we have not seen in Scotland so general and complete destitution, nor so wide-spreading epidemic fever as these gentlemen have witnessed and described in Ireland, yet it appears, from the facts already stated, that a considerable proportion of the lower orders in Edinburgh, and I believe in every great town in Scotland, are reduced every winter, and especially on occasion of the suspension of any considerable works, or of scarcity of provisions, to a condition very similar to that above described as existing so generally in Ireland; and the accounts given by the Irish practitioners—of families partially or wholly unemployed, scantily and irregularly fed, and depressed in spirits, obliged to part with their bed-clothes and part of their body-clothes for subsistence; collecting in town in winter, because there are no resources for them in the country; crowding together into small rooms in the dirtiest and worst-aired (because the cheapest) parts of the town, and frequently infected with fever by mere wandering in search of employment, or by travelling beggars—might really stand for a description of the circumstances of that portion of the inhabitants of Edinburgh (partly Scotch and partly Irish) among whom I have most frequently seen fever introduced, and almost always observed it to spread most certainly and most rapidly. In one instance, I remember a poor family wandering in search of employment, and infected with fever, who were driven from one part

* Medical Report of the Hardwicke Fever Hospital, by J. Cheyne, M.D., from the Dublin Hospital Reports, 2nd vol., pp. 45 and 49.

† Dr. O'Brien, in Dublin Medical Transactions, New Series, vol. i., part 2, p. 260.

of the town to another, and introduced the disease into three different districts, all inhabited by very poor people; and I traced not less than fifty cases of the disease to communication with that family, notwithstanding that several of its members were successively taken into the hospital.

I think myself justified, from the very frequent observation of such facts, in applying the experience of physicians in general in all countries, and especially of those who have witnessed the fever in Ireland, to its extension in Edinburgh, and concluding that the "want and misery" of a certain portion of the inhabitants, and the filth *within* the houses, the crowding, the negligent and reckless habits, and the occasional intemperance, which are the usual concomitants, and I believe the natural results, of this want and misery, are with us, as in Ireland, the great predisposing causes of fever, to which its frequent and general diffusion in this and other large towns in Scotland is chiefly to be ascribed.

And when I compare this state of things in these towns with the comparatively limited extension of contagious fever in most of the great towns in England, of which I have elsewhere given some examples,* and reflect on the resources which are there provided for persons likely to fall into a similar state of destitution, I cannot doubt that it is to the existence of the compulsory provision against indigence in England that the comparative exemption of the great towns from this great evil, of which I have elsewhere quoted proofs, is mainly to be ascribed.

I need hardly say that, according to the practical administration of the poor laws in Scotland, there is no legal provision for that destitution which results merely from want of employment; and that the allowances to aged, infirm, and disabled persons, and to widows and orphans, are so small, as in many instances not to preserve them from the state of destitution which, in the judgment of all experienced observers, gives the strongest predisposition to attacks of epidemic fevers.

The account of the Leeds House of Recovery for 1839 gives a striking illustration of the difference, in this respect, between the English and most of the Scotch and Irish towns. It is there stated that fever had appeared during the year in no less than 101 different streets or courts in that town; but the whole number of patients received from all these districts was only 201. This fact I consider as much stronger evidence of the efficiency of some cause or causes there acting, and resisting the extension of the disease, than the more partial introduction of fever into the town would have been.

In like manner, in the Report just published by Dr. Jenks, on the Sanitary State of Brighton, it is stated that the whole number of cases strictly designated as fever occurring there, in a population of about 40,000 persons, was 76 in a year (1839), notwithstanding that *the disease appeared in almost all parts of the town*, and furnished more in that and the preceding year than for fifteen years previously.

I must admit that the number of deaths from fever, reported in the two first Reports of the Registrar-General of England, is considerably greater than I expected, although not more than 16·7 per cent. of the general mortality, and not more than one-third of the mortality from

* On the Management of the Poor in Scotland, 2d Edition, p. 16.

consumption; whereas in Glasgow it exceeded the mortality from "consumption and decline of the lungs" in one year (1837), and in Dundee it exceeded that mortality for four years consecutively. But besides that the extension of fever was greater in England in the year 1837-38, to which the Reports apply, than in any other year during the present century;—and besides that great part of the mortality from fever in England takes place among the poor Irish, who have no such protection against destitution as the native English;—I can give decisive proof that the difference in this respect between the English and Scottish towns is much greater than appears on the face of the registers, in consequence of many cases being recorded in England as deaths from fevers, which were deaths from febrile diseases indeed, but not from that idiopathic contagious typhoid fever which is the curse of the great towns in Scotland. This appears distinctly from a table communicated to me by Mr. Chadwick, shewing the deaths from fever in the Bethnal Green parish (the worst in London in this respect) in 1838. There are 264 deaths by fever, which would imply about 3,000 cases; but of the 264 it is stated that 115 were below ten years of age. Now we know that the mortality from the idiopathic fever in children is trifling, not more than 1 in 35, according to Dr. Cowan's Tables, in Glasgow, and at least as small in Edinburgh. Therefore 115 fatal cases of true fever below ten would imply about 4,000 cases at that early age alone. From this it is quite obvious that many of the deaths returned as fever below the age of ten, must have been from diseases essentially different from the idiopathic fever. And this is fully confirmed by the statement of Dr. Jenks, who says, that of 31 cases returned as fever by one of the parish surgeons at Brighton, 19 were children under ten, "not one of whom had any typhoid symptoms, *the fever in all these cases being symptomatic*; and that of the whole 31 cases only 7 should have been registered as fever." And again, that of 68 cases styled fever in the dispensary books, "*many attended as out-patients*, many more were children under ten," and, by the surgeon's own statement, "not more than one-fourth could be said to be cases of typhoid fever."* I apprehend it, therefore, to be quite certain, that the exemption from continued fever, which is co-existent with the legal claim to relief for destitution in England, is much greater than the Reports to the Registrar-General indicate.

For these reasons I beg to express my firm conviction that any inquiry into the sanatory condition of the lower orders, and especially into the extension of contagious fever, in this or other great towns in Scotland, must necessarily be incomplete, and can lead to no permanently useful result, which does not include a thorough investigation of the nature and administration of the legal provision for the poor, not only in these towns but generally throughout the country, and a comparison between that provision and that which exists in those countries where epidemic fever in the great towns is found by experience to be more effectually controlled. And in order to shew that I entertain no visionary ideas of improvement of the condition of the people from an extension of the legal provision, I shall state more explicitly what I would anticipate as the practical result, in the great towns of Scotland, of a

* Report on the Sanatory State of Brighton, pp. 9, 10.

general and compulsory system of relief of indigence throughout Scotland, similar to that which exists in England, Holland, or the greater part of Germany.

1. I expect that a considerable number, probably several hundreds, of destitute persons, natives of other parts of the country, or even recently arrived from thence, who are now found in Edinburgh every winter, seeking for irregular employment, or for public or private charity, would remain at home, or could be sent back, having a decent provision made for them in their own parishes.

2. I expect that another considerable number, probably several hundreds, of persons able for work (some of them men, but the greater number widows or single women, chiefly field and garden labourers) who are thrown out of employment during several months of the year, and reduced to the miserable state of destitution above described, would be admitted into workhouses, and kept there in confinement, but in comparative comfort; and, if they should take fever, would be prevented from communicating the infection to others. Thus a larger portion of those destitute persons by whom fever is so often imported into the town, or among whom it spreads most readily, would disappear from our streets and closes; and this more especially if the Irish poor-law shall be effectual in offering an asylum or home to many disabled or destitute inhabitants of that unfortunate country.

3. I expect that many disabled or destitute poor, and widows and orphans, natives of Edinburgh, or long resident there, who now receive either no allowances, or such scanty allowances as condemn them to constant and numerous privations, would have their allowances considerably raised; they would be better fed and better clothed, and instead of being compelled to crowd together in the close and filthy districts of the town (where their rooms or lodgings are cheapest) they would be enabled to find habitations in healthier situations. Thus an adequate legal provision, although not directly removing the filth from the people, would, in many instances, remove the people from the filth in which they are now irretrievably involved.

4. I expect that a much stricter *surveillance* would be maintained over the destitute poor than under the present system, and that by refusing out-door relief to destitute persons whose conduct is found to be profligate, at the same time offering them the workhouse—and then putting the law strictly in execution against them if they were found begging—a much better security would be given to the public than under the present system, that money intended for the relief of suffering, shall not be applied to the indulgence of habits of intemperance.

I think it cannot be denied, that in all these respects the provision against destitution is much more effectual in the great towns in England, and in the greater part of the continent of Europe, than in this country; while, on the other hand, it has in Ireland, up to this time, been generally still worse than in this country: and when I reflect on the evidence already stated as to the connexion of contagious fever with destitution, and remember that Ireland has suffered more from this disease, for many years past, than any other country in Europe, and the great towns of Scotland very much more than those in England, and I believe more than those of any other country in Europe, except

Ireland, I cannot doubt that the extension and improvement of the provision against destitution in Scotland is the method by which alone, under Providence, this great and increasing evil can be permanently and effectually restrained.

And I will only add, that if the argument usually employed in this country *against* an adequate provision against destitution, viz., that such provision necessarily in the end increases the evil it is intended to relieve, had been a sound one, I think the inevitable consequence would have been, that in most parts of England where such provision has existed for above two centuries, the extension of epidemic fever would have been remarkably greater than in Scotland or Ireland, the reverse of which is unquestionably the fact.

If it be true, as I have stated, that the inadequacy of the legal provision in Scotland is a powerful cause of disease in the great towns beyond what exists in England, it will naturally be expected that the mortality will be decidedly greater, and I have no doubt that this is the case; but, after taking some pains on the subject, I have come to the conclusion that we must wait another year before we can give perfectly satisfactory evidence in regard to it. All estimates of the increase of population since the last census in 1831 are somewhat uncertain, and of course all statements of mortality having reference to such estimates are only approximations. I shall, therefore, only add here the mortality in Edinburgh for 1837-8, as compared with the population of 1831, including the West Church and Canongate, ascertained with much trouble by Mr. Watt, and compare it with the mortality of the same years in a few parts of England:—

Population in 1831	136,280
Deaths in 1837	5,300, 1 in 25·7
„ 1838	4,512, 1 in 30·2
Population in London in 1831	1,594,890
Deaths in London in 1837-8	53,597, 1 in 29·7
„ „ 1838-9	46,763, 1 in 30·3
Population of Manchester in 1831	236,935
Deaths in Manchester in 1837-8	8,373, 1 in 28·2
„ „ 1838-9	9,276, 1 in 25·7
Population of Liverpool, &c. in 1831	218,233
Deaths in Liverpool in 1837-8	9,042, 1 in 24·1
„ „ 1838-9	8,467, 1 in 25·7
Population of Birmingham in 1831	110,914
Deaths in Birmingham in 1837-8	3,317, 1 in 33·4
„ „ 1838-9	3,305, 1 in 33·5
Population of Leeds in 1831	135,581
Deaths in Leeds in 1837-8	3,572, 1 in 38·
„ „ 1838-9	4,690, 1 in 28·9

Thus it appears, that there is no town in England which has shewn a greater mortality, compared to the population of 1831, than Edinburgh did in 1837, except Liverpool in that year, when it was afflicted with a very fatal epidemic small-pox; and as I believe it to be quite certain that the population of all these towns had advanced much more rapidly between 1831 and 1837 than that of Edinburgh, I have not the smallest doubt that the true rate of mortality in the latter was very considerably

greater than in any of them ; besides which, it is to be observed, that all these are trading or manufacturing towns, in which various occupations are necessarily unhealthy, and the fluctuations of industry much greater than in Edinburgh.* Within the ancient Royalty of Edinburgh, as I am certain that the mortality was much greater than in the West Church or Canongate, and the increase of population between 1831 and 1837 very small, I think it certain that I was within the truth in the conjecture which I formerly hazarded, that the mortality in 1837 must have been as high as 1 in 24.

But I am aware that the defenders of the Scotch system of management of the poor have not lately urged the argument as to its effect in restraining the growth of the population with any confidence, and that they have not even offered any decided opposition to the statement which I conceive that a fair examination of the experience of various nations entitles us to lay down as a first principle in this department of political economy, viz., that a legal provision for the poor, managed even with common prudence, maintaining certain artificial wants and habits of comfort among the lowest of the people, and enabling them to obtain and to appreciate a good religious and moral education, *has a most powerful tendency to check excessive population.*

The main reliance of the defenders of the Scotch system is, on its alleged effect on the *character* of the people, and particularly on that quality which in all such discussions is always brought forward as the most valuable to themselves (as it certainly is in the first instance, the most economical to their superiors), their *independence*. I shall offer a few observations on this point, chiefly in the view of shewing in what manner the effect of different systems on this quality of the lower orders can be illustrated by numbers, and therefore be fairly brought under the view of this meeting.

1. It is quite plain, that to suppose *all* the lower orders to be independent, is to suppose the poor (in the sense in which the term is used in the Scriptures) to cease out of the land, and the duty and the virtue of charity to cease likewise, which is neither consistent with the warnings of Scripture, nor with the experience of any nation that has ever existed. However much we may admire the independence of the lower orders, therefore, we must expect that a large number of them—and this number continually increasing as a nation is peopled up to its resources, unless efficient means are taken to repress it—must necessarily be *dependent*.

The maintenance of independence among as many as possible of the lower orders is undoubtedly an important object ; but it is not the only, nor even the chief, object to be held in view when we contemplate the sufferings of poverty. The first object is, simply to do as we would be done by to our suffering brethren, to mitigate their sufferings as far as may be in our power ; and the maintenance of their independence may be very properly stated as the *limit* to our exertions ; just in so far as this,—that if by our bounty we make persons dependent on others who

* The English towns which are in this respect most similar to Edinburgh, are the cathedral towns Oxford and Cambridge, and Bath, in which I have no doubt that the mortality is much smaller.

would otherwise have been independent, we confer on them no permanent benefit. From which the practical inference seems to me to be, that consistently with the main object of relieving suffering, we do enough for the object of maintaining independence among the poor, if we make the situation of every one to whom relief is given less desirable *on the whole* than that of those who can keep themselves independent. And I think experience abundantly demonstrates that, consistently with this rule, a uniform and effective system of relief to destitution may be safely enforced, and this point, I apprehend, is capable of being demonstrated by statistics. I speak in the presence of men well acquainted with the practical working of the present poor-laws in England, and assert that it is statistically ascertained, that although the improved workhouses give complete relief to the sufferings of destitution, they are so much less desirable, on the whole, than independent industry, that the proportion of able-bodied persons who will resort to them, as long as they can live by their own industry out of them, is quite trifling; and the parts appropriated to the unemployed able-bodied (who have a right to claim admission there when destitute) are very often nearly, or completely, empty.

2. The great error, as it seems to me, in those who have been strongly impressed with this danger, lies in arguing as if there were no dependence but dependence on the law; and therefore *as if all who are kept off the poor-rate are independent*. Whenever any individual of our species is not provided for, either by his own labour, or the labour of his ancestors, or of his immediate relations, he is in a political sense *dependent*, and the moral and political dangers affecting his character, or the good of his country, which are to be apprehended from the loss of his independence, *are already incurred*, whether he is dependent on the law or on the bounty of individuals. When, therefore, we meet with persons who cannot maintain themselves by their own industry, and do not procure subsistence from their immediate relations, we meet with those who have already lost their independence, and the only question that remains is, what is to be, at least for a time, the mode of their dependence on others.

I have elsewhere given various reasons for thinking that the proper answer to this question is, generally speaking, in favour of dependence on the law; that this is, indeed, the only form of dependence which, in a complex state of society, affords *security* against destitution; and that the private bounty of individuals is more properly and beneficially exercised in conferring those innumerable benefits which man may bestow on man, after the mere necessities of life have been already provided for. But, in a political view, the simple answer to this question is to be found by inquiring whether, under the legal provision, or under the voluntary system, the *number* of the dependent poor is ultimately found to be greatest. Thus the question before us resolves itself into that which regards the effect of the legal provision on population, and is to be resolved, as I apprehend, only by experience, *i.e.*, by statistical facts. There are reasons for believing, as I have elsewhere stated, that the number of the dependent poor, as in Ireland, in Brittany, in various parts of Italy, even in some parts of Scotland where the poor-law is not enforced, rises much higher under the voluntary system of dependence

on the bounty of individuals—always in a complex state of society more or less casual and precarious — than it has ever been observed to do under the steady rule of a legal provision, even when injudiciously extended. In Ireland, it is 25 per cent. ; in Italy, 45 per cent. ; in Brittany, it comprehends at particular seasons nearly all the labourers and many of the farmers ; and it is hardly less in some of the unassessed parts of Scotland.

A recent work on pauperism in France, entitled, “ *Researches on Pauperism in France, by M. le Viconte Villeneuve de Bargemont, formerly Counsellor of State and Prefêt du Nord,*” contains a striking illustration of the same principle. The author says, that when appointed to the prefecture in the North of France, he made inquiry into the number of *pauvres*, *i. e.*, poor receiving assistance from public funds, and found that they were in the whole of that district one-sixth, or 16·6 of the population ; he states the proportion of the indigent to the rest of the population in Europe in general, at one-twentieth, or 5 per cent. ; but in England at one-sixth, or 16 per cent. (in this he is wrong), and attributes the excess of poverty in the northern provinces of France, in Artois, a part of Picardy and Normandy, to the proximity of England, which, he says, has *inoculated the rest of Europe with “ le veritable pauperisme.”*

He says he should vainly attempt to give an idea of the nakedness, the sufferings, the abject physical and moral degradation of the indigent labourers of the principal towns of this department, and that in Lille these amounted to “ *32 mille, près de la moitié de la population.*” But if it was the imitation of England, it certainly was not the imitation of the English poor-law which produced this result, for he expressly says, that “ all the relief granted consisted in some philanthropic subscriptions, supported by an inexhaustible spirit of charity, but which had become little productive and insufficient.” “ Up to this day,” he adds, “ our poor-law has had no other object than the *repression of disorders*, to which mendicity may lead.*

I think, therefore, we are enabled, by reference to experience and to statistical facts, to allay the apprehension of those who are so solicitous about the independence of the poor, by assuring them, that the extension of the legal provision is only wished for as applicable to those who have already lost their independence ; that this number extends much farther under the voluntary system, in an advanced stage of society, than under the legal provision ; and that under the sure guidance of experience, the legal provision may easily be so managed as to be strictly limited to such persons, and offer no obstacle, but every encouragement to their regaining their independence whenever their own exertions will suffice for that purpose.

At all events it seems to me, that until the number of recipients of parish relief affords a better measure of the number of destitute and dependent poor in Scotland, there cannot be a more transparent fallacy than to suppose, that an increase of the number on the poor’s roll implies any increase of poverty or destitution, or any diminution of the independence of the people, or that a diminished number on the poor’s roll implies a diminution of poverty and suffering ; and this fallacy runs

* Op. Cit. pp. 16 and 89.

through almost all the statistical statements that we have of the supposed pernicious effects of assessments.

The number of poor of all classes returned as receiving legal relief in the city of Edinburgh, Canongate, and St. Cuthbert's, is 5,004, in a population (in 1831) of 136,280, *i.e.*, about 1 in 27, or 3·7 per cent. of the population. But if we attend to the numbers receiving occasional relief from the different charitable associations in Edinburgh, we shall find that they are very far beyond that number.

The Destitute Sick Society, returns annually about	10,500
The Strangers' Friend Society	1,900
The House of Refuge	1,200
The Night Refuge, about	600
The Royal Infirmary of persons admitted, not because their complaints could not be managed at home, but simply because they cannot be regularly provided with the necessaries of life at home, at least	2,000
The Society for Incurables	100
The two Female Societies, and Old Man's Society, about	200
The Society for Clothing the Industrious Poor, about	200
A subscription raised last winter for relieving the most destitute of the poor	5,000
Total relieved not less than	22,600

All this is independent of the charities of individuals. It will be observed, that the amount given to each case, by almost every one of these charities is trifling; but all the persons applying for it are clearly in so far *dependent*, and it is also to be remembered, that to every one of these charities there are a number of applicants every week who receive nothing; and making an allowance for the same individuals being relieved repeatedly, I think we may infer from these data, that the dependent poor in Edinburgh are at least three times the number of the legal poor.

This is fully confirmed by the more specific statements which I formerly quoted, particularly from some of the missionaries employed in Edinburgh. Thus I stated, that of 120 families reported by Mr. Dalziel and Mr. Miller as in a very destitute state, only 30 (one-fourth) had legal relief; of 26 destitute families (out of work several months in the year, and whose earnings when employed seldom exceeded 3s. per week) reported by Mr. Westwater, only 6 had legal relief; of 19 very destitute families reported subsequently by Mr. Dalziel, only 4 had legal relief; and again, of 200 persons absolutely dependent on charity, whose cases were investigated by Mr. Chambers, only 38 had regular legal relief. In Dumfries, I stated that the destitute and dependent poor are fully 15 per cent. of the population, although the regular paupers are under 5 per cent., and all who are admitted to the legal relief only 10 per cent. I am informed by Mr. Stuart, of Hillside, near Lockerby, who has taken much pains in regard to the statistics of poverty in his neighbourhood, that he considers the perfectly destitute and dependent poor as 6 and 7 per cent. of the population, even in that agricultural district, although the paupers receiving any part of the legal provision are not above 3 per cent.

The statements formerly made from St. Andrew's, from the High-

lands and Islands, &c. abundantly confirm the general proposition, that *the pauperism of Scotland represents only a portion, in many places only a small portion, of our destitute and dependent poor.*

Now it were certainly absurd to suppose, that those who constitute this excess of the destitute poor in Scotland, above the recipients of legal relief, are *independent*. They are all dependent, more or less uniformly, on voluntary charity of one kind or another; and, in a great town, they are all dependent on the charity of persons to whom they make applications in one way or other, and who are ignorant of their persons, characters, and history, *i. e.*, they are dependent in one form or another of *beggary*. It is not a mere poetical fancy to say, that “the independence Britons prize too high” may “lead stern depopulation in her train;” and I cannot but think that I have done enough to shew, that the zeal which is so strongly manifested in Scotland for the maintenance of this virtue among the poor, has been carried much too far, when I have shewn that we have sacrificed, and are constantly sacrificing to it, not only the comforts but the lives of many of those unfortunate persons, who in this, as in every other country that ever existed, are dependent in some form or other on charitable assistance, and whose wants in other countries are regularly and effectively supplied. But I think there can be no doubt on this point if it be farther true, as I confidently assert, that this sacrifice has been, and ever will be, *unavailing*; that the number of *dependent poor* in Scotland is already greater than in most other countries; and that, so far as we can judge from the experience of other countries, it seems to be a general law of Providence to attach such a property of *re-production* to unrelieved destitution and suffering, as shall punish unto the third and fourth generation the sin of those who leave it unrelieved.

From all that has been stated, I think we are, at all events, fully justified in drawing this conclusion, that whether we regard the existing system in Scotland as designed to repress the growth of the population and its pressure on the means of subsistence, or to foster the independence of the lower orders, we must admit, that it has been singularly unsuccessful. And I am persuaded that whoever will take the trouble to inform himself correctly and statistically as to the results which have actually flowed from this system, and then carefully compare it, not exclusively as to its pecuniary cost, but as to its effects on life and health, on character and conduct, on the extension of the lower class of the population, and the continual reproduction of sin and suffering among them; with the uniform, regular, and effective provisions against destitution, and its attendant evils now in force in England, in Holland, and Germany, will be compelled to admit that in this department of civil economy we have been excelled by our neighbours.

I beg to state here that I most cordially agree with Dr. Chalmers in all that he said as to the importance of the principle of locality in the administration of relief to the poor, *i. e.*, in the importance of those who are to administer such relief confining themselves to limited districts, and becoming well acquainted with the characters and habits of all applicants for relief within these districts. I agree with him also in thinking that the minister and kirk-session in the landward parishes are a body well fitted for superintending the administration of relief. But

I do not agree with him in thinking that the heritors and kirk-session, who are to pay the tax, are the proper persons to judge what amount of relief is proper; and the reason is, that experience shews that under that system, the relief given is generally quite inadequate, and, in particular, the wish of the minister is very often overruled. Of this I shall only give two proofs. At Kilmuir, in the Isle of Skye, the legal provision is *3*l.** a year, distributed among the destitute of a parish of 2,000 people. This the minister distributes among 60 of the poorest of his parishioners, but says expressly, in his Report to the General Assembly, that if he had funds he would put 200 on the roll, on account of their extreme destitution. Again, Dr. Scott Alison states, "In many parishes in East Lothian there is no assessment for the relief of the poor, and where there are few resident gentry and farmers the privations of the poor are extreme. It generally happens that the minister endeavours to procure relief from the parish, but he seldom ventures to propose more than *1*s.** a week, because he knows that in general the proposition for more would not be listened to."

Thus however excellent the machinery for the administration of the poor fund in the landward parishes may be, it is rendered totally inefficient by the mere want of funds; and I apprehend that there can be no security against this, unless the decisions of the kirk-sessions, as to the amount of alimony to a pauper, were subject to a review of an accessible court of law, which, as late as 1821, was considered by the late Lord Robertson to be the existing law of Scotland, although the majority of the court of session then thought otherwise.

As to the administration of relief in towns, this is not managed by the kirk-sessions, but by the magistrates, or by certain bodies of men to whom the magistrates delegate their powers; and I fortunately have it in my power to lay before the section a statement of undoubted authority as to their mode of management in Edinburgh, with some notes on that statement, by Mr. Chadwick, Secretary to the Poor Law Commission in England, from which we may judge whether it is in the Scotch or the English towns that the principle of locality is best acted on.

I know well that Dr. Chalmers has long raised his voice most justly against the massing together of the poor, and putting them under a single inspector, in the administration of relief in Edinburgh and other large towns; but I know also that he has done so unsuccessfully, and the reason of his want of success I believe to be simply the want of funds. And as long as the people of Scotland continue to think it wise to expend on their poor, in the way of legal provision, only about one-fifth of the sum, in proportion to the population, which the people of England spend on theirs, I venture to predict that he will continue to be unsuccessful.

Dr. Wallace, late Professor of Mathematics in Edinburgh, now a zealous manager of the charity workhouse, engaged in admitting the poor as out-pensioners, says, "I attempted to find a system of rules by which I might perform that duty with justice and economy, but found there was no written code. It was not intended to give the poor as much as would support them; they were to get a certain allowance and make up the rest as they best could, only they were not to beg nor seek relief from any other charity. Now these being the only honest ways a

poor person without health, friends, or employment has of eking out the miserable pittance he gets from the parish, I cannot discover the propriety of this rule.* I made various trials to ascertain a rule according to which the amount of relief was granted, but could find none, and was obliged to conclude that there was none. After a year's experience I can state that *the only sure guide I had was the diligence and fidelity of the inspector (one for 55,000 people), and his good sense and kindly feeling towards the poor.* When the inspector has made his report the question arises, what allowance should be given to the applicant? There is no reason why the pension list should not be constructed on a principle of justice and economy as well as assurance offices and benefit societies; but having examined the list with care, I with confidence pronounce it to be formed without any correct notion of order. Thus each of 11 single women in the prime of life receives 6s. 4d. in six weeks, while each of 27 widows, with one child, receives only 6s., and many of this last class receive nothing. The allowances have been determined by the will of the presiding persons, not sitting all at once like a jury, but sometimes singly, and sometimes in pairs, and having no rule to guide them but precedent and their own feelings."

On this Mr. Chadwick observes, "It appears that in Edinburgh there is but one officer to investigate cases for the whole city, containing 55,000 inhabitants, and that the investigation is conducted without much order or method. The central power in England is the security for local strength, by officers acting upon system. Under the Poor Law Commissioners' regulation, in such a town there would be about four relieving officers. In the greater proportion of the unions it is a regulation laid down that there should be a relieving officer for every 5,000 of the population. Every guardian of a parish is expected to communicate anything which he may know of a particular case; but neither the poor nor the rate-payers are left to the discretion of unpaid officers, nor are those officers burdened with a difficult and disagreeable duty.

"Each case must be investigated by the paid officer; he must visit the spot; he must inquire into the reality of the claim, and the cause of the destitution, the capability of relations to contribute aid, and other particulars, entered under various heads as a report, in a book kept for the purpose, called the Pauper Examination and Report Book. For omissions in, or for the want of truth of any part of this Report, the officer is responsible. In general the examination of a case, by a properly-trained officer, is deemed so far superior that it is preferred to a report made by a guardian, with regard to any person of whom he may even have had personal knowledge; in fact, guardians do not consider it prudent to act singly out of the board.

* It is to be observed that I do not object to the expectation that those paupers who are able to do some work should do so. What I object to is the allowances being fixed on the supposition that all such persons can always find employment, as if the demand for labour in any particular locality could be forced by reducing the people to indigence; and the chief ground of the objection is the fact, ascertained by experience, that the expedient is ineffectual, and that the only effect of keeping down the allowances is to make people miserable who might otherwise be comfortable, and to depress the condition and lower the standard of comfort of the whole labouring population.

"In Edinburgh, as it appears from the statement, the guardians take upon themselves to determine whether the pauper shall have relief at all. It is very rare, except where there are known and well-assured means of employment and subsistence to be obtained by the applicant, that the responsibility of refusing relief absolutely to an applicant is undertaken by a guardian in England; with the above exception, the only discretion allowed them by the English law is, whether they shall have out-door or in-door relief, and, in case of out-door relief, what is the mode in which it shall be administered. The discretion to refuse relief to a person who has no apparent means of subsistence would be thought equivalent to giving the guardian the power of life and death of any individual, by exposing him to perish by starvation. Various rules of the commissioners might be quoted to prove this point.

"It is to be observed that for this large population in question in Edinburgh, there appears to be no medical officer. Under the new system of central control in England the local administration would be strengthened by the appointment of four medical officers. In consequence of the absence of any such machinery for Scotland, it was found impracticable to extend to it the provision for the extension of vaccination; the effect is, that whilst in England the people will probably receive a general protection by vaccination from that disease, the people of Scotland are unavoidably exposed to its ravages." In Edinburgh this is compensated by the dispensaries, chiefly supported by medical students; but in the country and many country towns there is no medical charity, even voluntary. "It does not appear that there is any adequate provision for the proper training of orphan and destitute children. The local power in England is strengthened by the union or aggregation, which admits of such classification, as to afford the means of appropriate treatment of each class; and the treatment by paid officers of classes of paupers is found to be in the end a cheaper mode of management."

Nothing can be farther from my intention than to represent the system now in force in England as perfect, or even the principles on which it is worked as in all respects clearly and satisfactorily laid down. The importance of the grand principle of the maintenance of artificial wants among the poor, not only with a view to their present comfort, but as a security against their future increase (which I consider as the most efficient preventive check) has not as yet been distinctly recognized.*

* When I mention the principle of artificial wants and habits of comfort as the true preventive check on population, I may perhaps be allowed to mention two illustrations, both statistical, of that principle, lately suggested to me by different friends.

The first was advanced by a member of the Society of Friends; speaking of the fallacy of the opinion, that a known security against destitution, on which the poor can rely, will necessarily make them reckless and improvident, he observed (as I think very truly) that if that doctrine had been true, the Society of Friends would by this time have been a society of paupers or beggars, because every one of them knows perfectly, from his infancy, that he never can come to want. Yet there is no more prudent nor more thriving class of the community.

The second was a fact stated in Mercier's "*Tableau de Paris*," that many of those women in Paris, who are instructed in different arts, and by their skill and industry raise themselves in the world, remain unmarried, and are without offspring, whereas the beggar women never fail to have families of children. This I regard

But I believe I am correct in saying that the following more strictly practical principles are those which guide the administration of relief in England :—

1. That there shall be a compulsory and effective provision, defined and regulated by the law, for the relief of destitution, whether resulting from age, or infirmity, or want of employment.

2. That this relief be so administered as to make the situation of every able-bodied pauper receiving it less eligible on the whole than that of an independent labourer.

3. That a system of strict inspection be exercised over all who receive this relief, with a view to its being always apportioned to their real wants, and so suited to their characters as to favour the effect of religious and moral instruction.

4. That in order to fulfil these conditions, particularly in the case of able-bodied persons, in the case of orphan children, in the case of old and infirm persons without relatives, and in the case of persons of immoral conduct, well-regulated workhouses be always at the command of those who administer this legal relief.

These propositions seem to me to contain the general result of the lessons of experience on this subject in all countries where it has been carefully and successfully studied. If we do not choose to examine the practice, or to trust to the experience of England, let us look to the example of Holland, of Prussia, Austria, Bavaria, Würtemberg, Switzerland, Denmark, Sweden, America, Russia, or even Siberia; in all I believe we shall find, under some variety of practice, the same principles admitted and enforced. But if we decline to compare the results of the system now in force in Scotland with the systems elsewhere established, and persist in the belief that our own experience is sufficient to guide us, that our practice is superior to that of other nations, and that the theory on which it has been chiefly rested is a sound one, I venture, with all possible deference and respect for the opinions of others who have thought differently, to assert, that we are trusting to a broken reed; that we are falling behind, not preceding, other nations in the advance of civilization; and, what is far more important, that we are mistaking, and, because mistaking, neglecting a duty which is equally recommended to us by nature and revelation, the faithful performance of which has been expressly enjoined on the more fortunate members of society, as an acceptable service to Him in whom we all put our trust, and without the faithful performance of which we have been expressly warned that “whosoever liveth is accounted dead before Him.”

In the discussion which took place at Glasgow, in the Statistical Section of the Association, after the reading of this paper, Dr. Chalmers, although opposed to a general system of assessment for the relief of the poor, made several very important admissions.

1. He admitted that assessments were advisable to support *medical* charities; and particularly that kind of charity which, he justly observed, is most neglected in Scotland,—institutions for incurables; but as another illustration of that characteristic property of reproduction, which, as we see in Ireland, always attaches itself to destitution and mendicancy, and makes it ultimately much more dangerous to a community than pauperism constituted by the law.

he objects to any such provision for the relief of mere destitution ; the distinction lying in this, that the former class of sufferings proceeds from the visitation of Providence, and the knowledge of the provision for their relief can have no tendency to dispose men to incur them, whereas the latter very often proceed from human improvidence or intemperance, which may be encouraged by such provision for their relief. Now, let us consider the true hearings of this admission, and the practical difficulties which immediately meet us, when we attempt to draw this line.

1. It will of itself justify, and even demand, a vastly greater amount of legal relief to the poor, than has ever yet been granted in Scotland ; it would justify, for example, giving to the whole expenditure of the Society for Relief of the Destitute Sick in Edinburgh (the most effective of the voluntary charities, and which annually spends above 2,000*l.* a year,) the authority and certainty of the law ; and it would justify assessments, not only to maintain this or similar charities, which give only temporary relief, but also to maintain either additional hospitals, or some additional provisions, for the permanent relief of that numerous class of destitute patients who are not received into, or are speedily dismissed from, all hospitals supported on the voluntary system, because their cases are tedious and uninteresting, and admit of no cure.*

2. If the legal provision is advisable to relieve the sufferings of those who have been disabled for labour by injury or disease, how can it be justly withheld from those who are incapable of labour themselves, and have been dependent on the labour of those to whom it is justly given ? How can it be justly granted, for example, to a labourer who is struck down by accident or disease in middle life, but denied to his aged parents, whom he had supported, or to the widow and orphans whom he may leave behind him ?

3. If such provision is justly given to those whom Providence has visited with incurable disease in middle life, how can it be justly withheld from those who are disabled by that visitation of Providence which the mere advance of years brings upon all, and whom circumstances *quite beyond their own control* had prevented, during their years of labour, from making any provision for their own old age,—a class who, from the different statements already given, appear to be very numerous in Scotland ?

4. Many of those who are merely destitute, are so from causes over which they have had as little control as over the dispensations of Providence ; for example, the failure of any particular line of industry in consequence of improvements in art, the glut of markets, commercial embarrassments from failure of banks or other establishments, or the general increase of population. In equity, destitution from such causes is equally entitled to a certain relief, as disability from accident or disease.

5. On the other hand, many of those who are disabled by disease, or even by accident, have brought these misfortunes on themselves by imprudence or intemperance. It may be plausibly maintained that these have as little claim, in equity, on charitable assistance as those who

* Knowing, as I do, the great extent of destitution in Scotland, which comes strictly under the head of disqualification for labour, by disease, it is matter of sincere gratification to me to find Dr. Chalmers on my side in maintaining the justice and expediency of a legal provision for all such destitution.

have lost employment by misconduct; but it is impossible practically to distinguish how much of disease is to be ascribed to intemperance, and how much to the visitations of Providence only.

6. Even if all destitution, independent of disease, were referable to misconduct, this misconduct cannot be ascribed to the children, or other dependents of those who become destitute; and if no security is given for their relief, great numbers of innocent persons are unjustly punished for the sins of a much smaller number of guilty.

II. While these considerations shew that the line by which the legal provision is to be circumscribed cannot, consistently with *justice*, be drawn in the way recommended, the *inexpediency* of excluding destitution, independently of disease, from participation in its benefits, becomes more obvious when we consider another admission distinctly made by Dr. Chalmers, that the representation given by myself and others, of the rapid progress of population among persons reduced to a destitute and degraded mode of life, is a true statement. If this be so, the denial of a fixed and certain relief to destitution, from whatever cause it proceeds, must necessarily tend to an increase of the evil,—the sin of neglecting the duty of charity is thus visited to the third and fourth generation of those who have committed it; and the practical question is reduced to that which I have always stated as the true object of the inquiry, viz., under what regulations is it found by *experience* that the sufferings and the evil consequences of destitution, are most effectually and permanently controlled.

These and other considerations seem to me abundantly to demonstrate the wisdom of the rule followed in England, Holland, and Germany, by which the claim to relief is given simply by destitution, and the character and conduct of applicants are considered as determining, not the question whether relief is to be given, but merely the question, what mode of relief is advisable in each case of ascertained destitution; and from the results of which I confidently infer that any nation which undertakes the duty prudently and systematically, may safely and most beneficially take on itself, as a public burden, the relief of all the destitution to be found within its limits, and thereby raise the standard of comfort in the lowest of its members to a point much higher than that which exists in Scotland.

III. The simplest and easiest mode of availing ourselves of the advantages of experience in Scotland appears from a further admission by Dr. Chalmers, that in the northern counties of England, the poor-laws had been well and frugally administered, and that the condition of the people is there good, from which he argued, that instead of contrasting the condition of England with an effective poor-law, with that of Ireland without a poor-law, we ought to contrast the prudent administration of relief to the poor in the north of England, with the profuse expenditure under the poor-law in the south. Here, I apprehend he has not adverted to two facts of the utmost importance, 1st, That the administration of the poor-law in the south of England is now assimilated to that in the north,—the great abuse of indiscriminate out-door relief to the able-bodied poor, which was the true difference of the system pursued in the south and in the north, having been done away; and 2nd, That the allowance to aged and disabled persons, and to widows and orphans, and the extension of the right of relief to able-bodied poor in work-

houses, have been long, and are now, as liberal in the north of England as in the south; the reason of the great difference of expenditure formerly having been that, in the south a great part of the wages of labour were paid out of the poor-rates, which abuse never existed in the north.

It is to be observed, therefore, that the only forms of legal relief to destitution which any one proposes for Scotland, have long existed in the north of England equally as in the south, and that the general and admitted absence of abject destitution in the northern counties of England, without any excessive pressure of the poor-rates on the richer inhabitants, is precisely a case to prove to the inhabitants of Scotland what results are to be expected from a prudent but liberal extension of their legal provision for the poor.

IV. Dr. Chalmers laid some stress, on this as on other occasions, upon the supposed influence of a legal and efficient provision for the poor, in extinguishing family affection among them; but he has as yet made no answer to the following objections to his statements on that head.

1. Although there may have been many individual instances of neglect of relatives in England, which might be attributed, at least in part, to the system of indiscriminate out-door relief to able-bodied persons (now abolished), yet there is certainly no evidence of any deficiency of indications of family affection among the English poor, under the present system of legal provision there. Mr. Felkin, of Nottingham, and several other gentlemen, who have recently had ample experience as guardians of the poor in England, have fully confirmed, in conversation with me, the statements which I formerly made on this subject, chiefly from the testimony of several medical men who have seen much of the lower orders in England. The following is a strong additional testimony to the same purpose from Dr. E. Haward, an intelligent and zealous practitioner in the south of England, who has studied medicine in Edinburgh.—“I can testify that the assertion of there being less family affection among the English poor, even under the old law, than there is in Scotland, is *entirely* without foundation. I have, for many years, been accustomed to visit the poor, both under the old law and under the amendment, having had the entire charge of the poor of a district comprising six extensive parishes; and under both, I consider the English standard of domestic affection superior to the Scotch.”

2. It appears from what has been stated above, in strict conformity with what I have elsewhere observed, that among the most destitute of the Scottish poor, even of tolerably regular habits, there is often a very great deficiency of family affection, or care of relatives; so that the Scotch system of management of the poor, if designed to promote this virtue among them, has been equally unsuccessful in that respect, as in the others already considered. Thus, it has been already stated, that in several different parts of Scotland where careful inquiry was made, the number of persons living in a very destitute state, who received any assistance from their relatives, was not more than one-fifth of the whole; and several persons well acquainted with the habits of the lower orders in our large towns have confirmed my observation, that the greatest number of desertions of families among them occur in those whose character partakes of the recklessness and improvidence usually accompanying habitual destitution, and whose wandering habits have prevented their acquiring any certain claim to parochial relief.

3. In all countries it is found that the strongest feelings of family affection are seen in persons of the *middle* or *even of the higher ranks*, whose minds have undergone more or less of that cultivation which is necessarily out of the power of those who are constantly and anxiously occupied in the pursuit of the first necessities of life. From which we may infer, that security against destitution, if accompanied by religious and moral education, can have at least no injurious effect on family affection; and that, by reducing people to destitution, we are much more likely to weaken than to strengthen those sacred ties.

As to what was said, on this occasion, of the experience of St. John's parish in Glasgow, during the time (from 1820 to 1838) when the poor in it were provided for without assessment, it seems sufficient to say that no answer was made to the observations on that experiment, which I had made in my reply to Mr. Monypenny (pp. 62 to 64). There was no evidence as to the amount of destitution in the parish not admitted on the poor's roll during the continuance of that experiment, as compared with other parts of Glasgow—as to the extent to which fever spread in it during the late epidemic, nor to which extraordinary assistance was sought, or appeared to be required in it in times of general distress. It was admitted that many of the elders and deacons, who took charge of the poor in that parish, belonged to other parts of the town, and often procured employment in those other parts for persons likely to become destitute in St. John's; and it appeared farther, even on a cursory inspection of the parish, that although a poor, it is by no means a destitute district, being for the most part suburban; and containing very little of that depressed, degraded, and rapidly migratory population, which constitutes so great and so dangerous a part of the inhabitants of the central and poorest districts of the large towns in Scotland.

Vital Statistics of Glasgow, illustrating the Sanatory Condition of the Population. By ROBERT COWAN, M.D., Professor of Medical Jurisprudence and Police in the University of Glasgow.

[Read before the Statistical Section of the British Association, 21st September 1840.]

“La misère, avec les privations qu'elle amène à sa suite, est une des causes les plus influentes sur la mortalité.”—QUETELET.

IN the following paper it is proposed to lay before the Statistical Section of the British Association—

I. Tables of the climate of Glasgow—of the progress of the population—of the marriages, births, and deaths, and the ratio which they bear to the estimated population—of the still-born, and the baptisms, distinguishing males and females, and their relative proportion—of the deaths under five years of age—of the relative mortality under, at, and above five years of age—of the relative mortality of the different months and seasons of the year—of the increase and decrease of deaths at each age, and of the proportion of burials at the public expense.

II. Causes of the high rate of mortality in Glasgow—existence of epidemic diseases affecting the adult and infantile portions of the population respectively—tables of the numbers affected with fever treated in the hospitals of Glasgow—and in their own houses at the public

expense, within the burgh—of the deaths from fever during the last five years, in the city and suburbs—of the estimated numbers attacked—of the deaths monthly from fever, for four years, distinguishing the sexes, and giving the proportion to the whole deaths monthly.

III. Number of persons admitted into the Fever Hospital, distinguishing the country, sex and age of each individual—the mortality at each interval of age, distinguishing males and females, with a combined table of the deaths at each age—of the numbers exposed to contagion—of the numbers in whom eruption appeared—of the mortality of the eruptive and non-eruptive cases.

IV. Map of the city, shewing the division of the districts, and the number of fever patients in each.

V. Tables of mortality from influenza in 1837.

VI. „ „ cholera in 1832.

VII. Epidemics of children :—

1. Small-pox, mortality of, with the ages.

2. Scarlet fever „ „

3. Measles „ „

VIII. Deaths from all these diseases, and estimated number attacked during the last five years.

IX. General remarks.

I.

“The city of Glasgow is situated in latitude 55° 51' 32" North, and longitude 4° 17' 54" West, according to the determination of Dr. Wilson, formerly Professor of Astronomy in the University. The mean heat of Glasgow was formerly determined by Dr. Thomas Thomson to be 47° 57' of Fahrenheit. In the second edition of Dr. Cleland's folio statistical work, pp. 102 to 109, the yearly quantity of rain is given for 30 years, as ascertained by Dr. Couper, Professor of Astronomy in the University, shewing a yearly average of 22·328 inches. The least quantity, in any one year, was 14·468 inches in 1803; and the greatest 28·554 inches in 1828.” *

By the kindness of Mr. John Couper and of Professor Nichol, I have been enabled to bring down Dr. Cleland's table to the end of 1837.

Table shewing the Depth of Rain in each Month for the last Ten Years, as extracted from the Records of the Rain Gauge at the University, Glasgow.

MONTHS.	1828	1829	1830	1831	1832	1833	1834	1835	1836	1837
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
January .	2·345	0·523	0·350	0·520	0·620	0·256	3·954	0·985	3·868	1·956
February .	1·682	1·752	1·374	2·000	1·565	2·609	1·368	2·188	0·732	2·674
March .	0·974	1·357	1·463	2·531	1·906	0·598	1·759	1·582	2·375	1·500
April .	1·253	0·516	3·813	1·481	1·147	1·072	0·134	0·717	1·098	1·646
May .	2·873	1·263	1·637	0·370	1·205	0·778	0·762	1·992	0·173	1·857
June .	2·291	1·686	0·978	0·980	2·647	2·617	2·078	0·478	1·812	2·241
July .	3·692	1·725	2·315	2·120	0·822	1·092	1·183	1·875	4·535	3·322
August .	1·734	5·207	1·656	1·940	2·314	0·936	2·523	1·625	2·902	2·610
September	1·985	1·425	3·511	1·952	1·259	1·018	2·578	4·554	4·549	1·570
October .	1·472	3·791	1·834	4·313	4·500	1·987	1·403	1·515	3·834	2·997
November	3·571	1·896	5·461	2·822	2·072	1·753	3·007	3·417	3·158	2·293
December	4·682	1·348	1·527	1·908	2·728	5·202	1·112	1·738	2·673	1·963
Total. .	28·554	22·491	25·921	22·937	22·785	19·908	21·861	22·666	31·709	26·629

* Statistical Account of Scotland, article GLASGOW.

To Dr. Hugh Colquhoun, of this city, I am indebted for the following valuable scientific summaries of the weather for the five years from 1834 to 1838. The observations were made at a height of 166 feet above the level of the sea.

*Mean of Observations made at 9 A. M., and 9 P. M.**

MONTHS.	Barometer at 32°.					Thermometer.				
	1834	1835	1836	1837	1838	1834	1835	1836	1837	1838
	Inches.	Inches.	Inches.	Inches.	Inches.	° /	° /	° /	° /	° /
January . .	29·378	29·955	29·653	29·790	29·785	41·61	37·78	37·84	36·13	30·21
February . .	29·838	29·522	29·710	29·595	29·516	40·24	39·75	35·39	40·55	29·48
March . . .	30·060	29·829	29·212	29·884	29·545	42·55	40·13	38·60	34·39	37·42
April . . .	30·208	30·094	29·698	29·700	29·582	46·03	43·95	42·05	38·28	40·30
May . . .	29·910	29·784	30·213	29·816	29·788	52·65	48·87	51·04	48·21	46·58
June . . .	29·787	30·016	29·615	29·815	29·554	56·14	55·28	55·19	56·89	53·49
July . . .	29·982	29·909	29·688	29·753	29·641	59·69	56·23	54·38	60·80	56·92
August . .	29·672	29·997	29·841	29·813	29·519	57·55	58·64	53·17	56·90	55·64
September .	29·993	29·479	29·690	29·709	29·678	54·95	52·27	47·37	52·99	52·92
October . .	29·830	29·622	29·558	29·762	29·596	49·60	45·56	42·89	48·92	46·11
November .	29·855	29·754	29·325	29·557	29·274	43·77	41·85	38·11	39·68	39·60
December .	30·195	30·065	29·608	29·722	29·697	42·15	38·67	38·27	41·95	40·76
Average . .	29·896	29·827	29·818	29·743	29·598	48·91	46·58	44·52	46·31	44·04

The comparative prevalence of the several winds will be seen from the following Table:—

Number of Days in which each Wind prevailed.

WINDS.	1834	1835	1836	1837	1838	Total.
North . . .	15	18	25	15	19	92
North-east . .	67	70	54	90	61	342
East . . .	17	35	19	22	68	161
South-east . .	7	4	5	3	8	27
South . . .	8	9	7	6	13	43
South-west . .	135	93	124	147	95	594
West . . .	93	192	90	45	71	401
North-west . .	23	34	41	37	30	165
						622
						1,203

To this may be appended the following epitome of meteorological observations during the same period:—

DESCRIPTION.	1834	1835	1836	1837	1838
Wind high, or inclining to high . . Days	60	55	72	33	52
„ slight „	305	315	293	332	313
Weather clear „	125	104	91	113	97
„ cloudy or dull „	240	261	274	252	268
Rain, or Snow with „	84	75	133	115	89
„ changeable „	86	96	72	61	72
„ without „	195	194	160	189	204
Frost „	8	23	30	32	54
Depth of Snow Inches	1	9	20	11	18

* Dr. Cowan's MS. contained the results of the observations at these two hours, as well as the mean. The latter alone is inserted here.

The following meteorological table for 1839 was drawn up by Graham Hutchison, Esq., and is extracted from the Mortality Bill for 1839. The observations were made at an elevation of about 120 feet above the level of the sea:—

MONTHS.	Common Thermometer.	Barometer.	Weather.		Winds at 10 o'clock, A. M. (Number of Days).							
	Mean heat at 10 o'clock, A. M.	Mean height at 10 o'clock, A. M.	Dry Days throughout.	Days on which more than Rain or Snow fell.	East.	North-east.	North.	North-west.	West.	South-west.	South.	South-east.
January .	36.1	29.6	10	21	..	2	4	9	6	10	..	..
February .	38.3	29.7	9	19	1	2	..	3	8	8	5	1
March .	39.7	29.7	10	21	6	8	2	..	5	6	1	3
April .	45.6	30.0	17	13	6	4	1	..	6	10	..	3
May .	51.7	29.9	22	9	1	9	4	5	6	3	2	1
June .	59.3	29.8	17	13	2	9	1	2	7	4	3	2
July .	61.3	29.7	15	16	1	4	..	7	3	8	7	1
August .	58.9	29.8	12	19	1	4	1	3	5	11	5	1
September	55.1	29.4	7	23	3	1	..	3	4	12	3	4
October .	48.8	29.9	18	13	2	12	..	..	3	5	5	4
November	43.9	29.5	7	23	5	10	..	4	..	7	1	3
December	38.1	29.5	14	17	16	..	..	1	3	4	2	5
	48.066	29.708	158	207	44	65	13	37	56	88	34	28

“The lowest temperature registered in 1839 was 18° Fahr., which occurred in the morning of the 21st of February; the highest was 81° Fahr., which occurred on the 17th of June, making an annual range between these extremes of 63° Fahr. The lowest registered altitude of the barometer in 1839 was 27.9 inches, which occurred during the great storm at 7 o'clock A.M. of the 7th of January; the highest altitude was 30.6 inches, which occurred on the 10th and 11th April, making an annual range of 2.7 inches.”

The following Table of the progress of the population is given for the purpose of exhibiting the data upon which the annual amount of population from 1822 has been calculated, and of comparing the number of marriages, births, deaths, the number of persons admitted into the hospital, and the number affected with fever and other epidemic diseases, with the population, as accurately ascertained at the different enumerations:—

Years.	Population.	Years.	Population.
1791	66,578	1819	147,197
1801	83,769	1821	147,043
1811	110,460	1831	202,426

According to the census of 1831, 3,908 was the amount of the rural, and 198,518 of the town, population. The number of males was 93,724, and of females 108,702, being in the proportion of 100 to 116. The numbers who were natives of Scotland and of other countries were respectively as follows:—

Scotch.	English.	Irish.	Foreigners.	Total.
163,600	2,919	35,554	353	202,426

The ages of persons in Glasgow, and in the suburban parishes of Barony and Gorbals at the same period, may be seen in the next Table.

AGES.	Males.	Females.	Total.
Under 5	15,422	14,855	30,277
From 5 to 10 . .	13,127	12,580	25,707
„ 10 „ 15 . . .	10,491	10,720	21,211
„ 15 „ 20 . . .	8,489	12,256	20,745
„ 20 „ 30 . . .	15,177	23,008	38,185
„ 30 „ 40 . . .	12,179	14,240	26,419
„ 40 „ 50 . . .	8,685	9,329	18,014
„ 50 „ 60 . . .	5,549	6,099	11,648
„ 60 „ 70 . . .	3,228	3,692	6,920
„ 70 „ 80 . . .	1,090	1,502	2,592
„ 80 „ 90 . . .	260	385	645
„ 90 „ 100 . . .	26	32	58
„ 100 and upwards .	1	4	5
Total	93,724	108,702	202,426

It is quite obvious from these tables that the increase of population in Glasgow has arisen in a very great degree from immigration, and that from the increased demand for female domestic servants, and for female labour in the numerous cotton and power-loom factories and bleachfields in the neighbourhood of the city, a large proportion of the immigrants have been females. Those who resort for employment to towns are generally from the age of 15 to 25, a fact of some importance in reference to fever, as will afterwards be seen; and most of this portion of our population are, at this early age, emancipated from the wholesome and salutary check of parental discipline, and consequently become more liable to disease.

In 1819 there was one Irish person out of every 9.67 of the inhabitants; and in 1831 one out of every 5.69. From this increase of Irish alone, without including the influx of labourers from the highlands and lowlands of Scotland, it is evident that the relative proportion of the middle and wealthier classes to the labouring class must have been yearly diminishing, and to this may be traced one source of the increasing rate of mortality in Glasgow.

Prior to the census of 1841 it will be quite impossible to ascertain the number of Irish in Glasgow, but they probably amount to 1 in 4 of the inhabitants. With regard to the number of the Gaelic population, it appears, from a census made in 1836, that it amounted to 22,509, but the proportion of the sexes was not ascertained.

At the census of 1831, out of 143,142 individuals, which was the total number of the population between 10 and 70 years of age, the occupations of 103,001 were recorded, and of these 29,287 were connected, either directly or indirectly, with the manufacture of cotton goods. The number of labourers was about 6,614, the number of paupers 5,006.

Marriages—From the natural and laudable anxiety of the female, and of her relations, to possess legal and undoubted evidence of a marriage having taken place, the marriage register of Glasgow, and of its suburbs, may be held as correct for all statistical purposes. Such is the opinion of Dr. Cleland, and in its truth I feel quite disposed to concur. If there is any error, it must be in stating the actual number of marriages too low, for many marriages termed “irregular marriages,” though strictly legal, are not inserted in the register. From the very accurate abstract of the proclamations of marriages, drawn up for Mr. Watt for the Mortality Bill for 1839, it is quite evident that where the parties reside in different parishes, there must be two proclamations and only one marriage, and for 1839 this would make a difference of 218. On the other hand, there are only two marriages entered in the register for 1839 as celebrated irregularly; while every person acquainted with the character of the population, must be aware that the irregular marriages are very numerous, and their omission from the register must much more than counterbalance any surplus arising from parties being proclaimed in different parishes. From the following Table it appears that the ratio of marriages to the population, though always high, is also fluctuating, depending on the state of trade and the prices of provisions. The extremes are to be found in the year 1825, which was remarkable for its “prosperity;” and in 1837, which was distinguished by the reality of the destitution and suffering which then prevailed. The mortality of 1831 and 1832 was, as usual, followed by an increased number of marriages in 1833 and 1834.

Table of the Proclamations of Marriages in Glasgow, and their Annual Ratio to the Population, during Eighteen Years, from 1822 to 1839.

Years.	Marriages.	Population.	Ratio of Marriages to Population.	Years.	Marriages.	Population.	Ratio of Marriages to Population.
1822	1,470	151,440	1 to 103·08	1831	1,867	202,420	1 to 108·42
1823	1,650	156,170	„ 94·64	1832	1,979	209,230	„ 105·72
1824	1,732	161,120	„ 93·02	1833	2,335	216,450	„ 92·69
1825	1,982	166,280	„ 83·98	1834	2,359	223,940	„ 94·93
1826	1,576	171,660	„ 108·92	1835	2,297	235,000	„ 102·30
1827	1,635	177,280	„ 108·42	1836	2,370	244,000	„ 102·95
1828	1,866	183,150	„ 98·15	1837	2,095	253,000	„ 120·76
1829	1,829	189,270	„ 103·48	1838	2,406	263,000	„ 109·31
1830	1,919	193,650	„ 101·95	1839	2,413	272,000	„ 112·72

Still-born, Births, and Baptisms.—The registration of births is not attended to in Glasgow, and the register of baptisms is very defective, as a great number of dissenters decline to register the baptism of their children, and many members of the Establishment omit to do so from carelessness.

The table of baptisms registered is here subjoined, not for the purpose of comparing the numbers with the population in order to ascertain the ratio of births, but merely to exhibit the relative number of the sexes born in Glasgow, in so far as it can be drawn from the numbers baptized and the numbers still-born.

Dr. Cleland, impressed with the importance of ascertaining the

number of births in Glasgow, in connexion with the census, applied to those Reverend and Lay Pastors who are in the practice of administering baptism, for a register of the baptisms during the years 1820 and 1830, being the years preceding the Government census of 1821 and 1831. He also applied to Baptists and others, who do not baptize their children, to know the number born at maturity to members of their society; and from these sources he ascertained that during 1820 there were 2,370 children born or baptized, whose names were not entered in the public register; and that in the year 1830 the number unregistered amounted to 3,172. For those two years, therefore, the numbers approximate pretty nearly to the truth; but when the number of married persons in the city, who are not under the surveillance of any pastor, is considered, it must be allowed that the omissions in the number of births must be numerous, even for the years 1820 and 1830, notwithstanding the laudable exertions of Dr. Cleland to obtain accurate and complete returns.

The Registered Baptisms in 1820 were . . . 2,661 }
 ,, Unregistered Baptisms and Births . . . 2,370 } 5,031

Which, compared with the population of 1821 (147,043), was 1 in 29·22.

The Registered Baptisms in 1830 were . . . 3,225 }
 ,, Unregistered Baptisms and Births . . . 3,172 } 6,397

Which, compared with the population of 1831 (202,426), was 1 in 31·64.

The still-born are not included in the above statements. They amounted in 1820 to 247; and in 1830 to 471.

The births, baptisms, and still-born, in 1820-21 are as 1 in 27·85 of the population; and in 1830-31 as 1 in 29·47.

Table of the Registered Baptisms and of the Still-born, distinguishing the Sexes, in each Year from 1822 to 1839.

Years.	Registered Baptisms.		Still-born.		Years.	Registered Baptisms.		Still-born.	
	Males.	Females.	Males.	Fem.		Males.	Females.	Males.	Fem.
1822	1,573	1,399	157	125	1832	1,840	1,548	332	292
1823	1,462	1,489	183	158	1833	1,750	1,715	306	276
1824	1,565	1,537	180	136	1834	1,826	1,523	313	248
1825	1,689	1,420	179	148	1835	1,651	1,633	368	283
1826	1,599	1,401	183	135	1836	1,795	1,530	415	287
1827	1,523	1,297	180	169	1837	1,620	1,462	371	245
1828	1,630	1,483	213	195	1838	1,641	1,518	336	247
1829	1,608	1,514	228	233	1839	1,580	1,432	318	287
1830	1,678	1,547	246	225	Total	29,860	27,056	4,785	3,978
1831	1,830	1,608	277	289					

It is a very remarkable fact, which has been long known, although the true causes of it are still veiled in obscurity, that in every country the proportion of males born is greater than that of females. The proportions vary in the different countries of Europe, but the mean is 106·00 males to 100 females. In towns the proportion of males to females is not so high as in the country; and where the observations

have been extended to legitimate and illegitimate births, as has been the case in various countries on the continent of Europe, it has been ascertained that the proportion of males is greater among the legitimate than among the illegitimate births.

The number of registered baptisms in Glasgow, from 1822 to 1839, amounts to 29,860 males, and 27,056 females, being in the ratio of 22 to 20, or 110 to 100; a proportion much above that of any other country or city in Europe.

Had all the births in Glasgow been registered, the proportion between the sexes would have been very different. The baptisms are all, or nearly all, those of legitimate children: they are the results of marriage chiefly among the wealthier classes, who alone are attentive to the registration of the baptism of their children. These marriages are also chiefly contracted by those parties in the upper and easy classes of society, among whom the age of the husband exceeds that of the wife by at least five or six years, and hence the greater proportion of males born to females; as it is an established fact, that where marriages are contracted in which the wife is older than the husband, or is even of the same age, female births predominate over the males. The workmen of Glasgow marry early; they marry females about their own age, and consequently a greater proportion of female children are born to them than to the wealthier class of married persons, among whom male births predominate.

From the register of births being imperfect, it is unnecessary to compare the number of the still-born with the births, except for the years 1820 and 1830. The number of children still-born, as drawn from the register of burials from 1822 to 1839, amounts, during that period, to 4,785 males, and 3,978 females, being in the ratio of 24 to 20.

In 1821 there was one Still-born for 21·36 Births
1831 ,, ,, 14·59 ,,

The proportion for 1821 is nearly the mean of nine of the principal towns of Europe, that for 1831 is exceeded only by that of Strasburg. In Hamburg it is 1 in 15; in Amsterdam, on an average of twelve years, it is 1 in 16·9.

Table of the Number of Still-born in each Month, from 1835 to 1839.

MONTHS.	1835	1836	1837	1838	1839	Total.
January . .	61	59	76	74	54	324
February . .	52	46	57	42	48	245
March . . .	66	67	67	49	54	303
April . . .	64	58	59	66	40	287
May	39	50	53	61	48	251
June	56	57	49	41	43	246
July	53	64	41	42	56	259
August . . .	67	66	40	41	47	261
September .	46	55	47	35	45	228
October . . .	45	58	40	33	56	232
November . .	59	74	42	46	52	273
December . .	43	48	42	53	62	248
Total . . .	651	702	616	583	605	3,157

Winter	845	} Total, 3,157.
Spring	. . . . .	835
Summer	. . . . .	756
Autumn	. . . . .	721

Deaths.—The Mortality Bills of Glasgow were first placed upon a proper footing by the exertions of Dr. Cleland. They have been regularly published since 1821. The Bills for the four years from 1835 to 1838, were drawn up by Mr. Paul, and that for 1839 by Mr. Watt. The Bills for the last five years exhibit numerous tables, distinguishing, among other things, the diseases of which the parties died, and they contain much useful and interesting information.

The following Table, exhibiting the amount of the estimated population and the rate of the mortality in Glasgow during the last eighteen years, is extracted from the Mortality Bills. It will be observed that the rate of mortality is calculated from the deaths, and not from the burials. The burials of still-born, which are excluded, amounted, during the eighteen years, to 8,763.

Years.	Population.	Deaths.	Rate of Mortality.	Years.	Population.	Deaths.	Rate of Mortality.
1822	151,440	3,408	1 in 44·436	1831	202,420	5,981	1 in 33·845
1823	156,170	4,286	,, 36·437	1832	209,230	9,654	,, 21·672
1824	161,120	4,354	,, 37·005	1833	216,450	6,050	,, 35·776
1825	166,280	4,571	,, 36·374	1834	223,940	6,167	,, 36·312
1826	171,660	4,220	,, 40·677	1835	235,000	7,198	,, 32·647
1827	177,280	4,787	,, 37·033	1836	244,000	8,441	,, 28·906
1828	183,150	5,534	,, 33·095	1837	253,000	10,270	,, 24·634
1829	189,270	4,991	,, 37·922	1838	263,000	6,932	,, 37·939
1830	195,650	4,714	,, 41·504	1839	272,000	7,525	,, 36·146

“In this table the population from 1822 to 1830, and from 1832 to 1834, both inclusive, was obtained by interpolating a series based on the Government enumerations of 1801, 1811, 1821, and 1831; that for 1835, 1836, and 1837 has been rated a little higher than the series warranted, as being in all likelihood near the truth.”*

The increase in the mortality of late years will probably have checked the progressive amount of the population.

Table of the Deaths under 5 Years of Age, and their Ratio to the Population.

YEARS.	Number of Deaths under 5 Years.	Proportion of Deaths under 5 Years to Population.	YEARS.	Number of Deaths under 5 Years.	Proportion of Deaths under 5 Years to Population.
1822	1,491	1 in 101·63	1831	2,540	1 in 79·68
1823	1,984	,, 78·71	1832	3,293	,, 63·53
1824	1,979	,, 81·41	1833	2,807	,, 77·11
1825	2,033	,, 81·79	1834	2,748	,, 81·49
1826	1,630	,, 105·31	1835	3,493	,, 67·27
1827	2,105	,, 84·21	1836	3,889	,, 62·74
1828	2,305	,, 79·45	1837	3,875	,, 65·29
1829	1,886	,, 100·35	1838	3,133	,, 83·91
1830	2,000	,, 97·82	1839	3,777	,, 72·01

* Mortality Bill, 1837.

From the foregoing table it appears that the mean annual mortality in Glasgow—

From 1822 to 1830, both inclusive, was . . 1 in 38·275
1831 „ 1839 „ „ „ . . 1 „ 31·986

The mean annual mortality under five years of age—

From 1822 to 1830, both inclusive, was . . 1 in 90·07
1831 „ 1839 „ „ „ . . 1 „ 72·56

The deaths under five years of age for the nine years ending in 1830, were 42·91 per cent. of the whole deaths, and for the nine years ending 1839, 43·32 per cent.

Table of the Increase of Deaths, with the Ages, in each Year from 1835 to 1839.

Years.	AGES.											Total.
	Under 1 Year.	1-2	2-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	70 and upwards.	
1835	362	342	41	163	142	29	18	13	..	..	43	1,153
1836	60	160	176	..	..	190	190	124	134	138	117	1,289
1837	1	34	..	..	129	252	397	399	299	240	197	1,948
1838	..	..	..	..	..	..	..	..	..	..	3	3
1839	232	226	186	135	49	..	..	..	..	26	24	878
Total	655	762	403	298	320	471	605	536	433	404	384	5,271

Table of the Decrease of Deaths, with the Ages, in each Year from 1835 to 1839.

Years.	AGES.											Total.
	Under 1 Year.	1-2	2-5	5-10	10-20	20-30	30-40	40-50	50-60	60-70	70 and upwards.	
1835	..	..	..	..	..	..	..	..	59	30	33	122
1836	..	..	..	15	31	..	..	..	..	..	..	46
1837	..	..	49	57	30	..	..	..	..	..	1	119
1838	272	393	77	64	186	397	511	393	419	345	284	3,341
1839	..	..	..	..	..	32	62	130	7	..	54	285
Total	272	393	126	136	220	429	573	523	485	375	372	3,913

Deducting the decrease from the increase there remains a total increase of 1,358.

From these tables it appears, that of the increase of deaths in 1835, amounting to 1,153, 908 were under 10 years of age, and 245 above that age; of the increase in 1836, amounting to 1,289, 396 were under 10, and 893 above 10; while in 1837, of the increase, amounting to 1,948, 35 were under 10, and 1,913 above that age. In 1838 the increase was 3 at upwards of 70 years of age, while there was a decrease at every other age, amounting in all to 3,341. In 1839, of the increase, 779 were under 10 years of age, and 99 above it.

Early in 1838 I stated, in a published paper, that the rate of mortality in Glasgow had already for the present reached its maximum, and that during the next year or two the mortality bills would, as usual after the cessation of any epidemic disease, exhibit a marked diminution in the ratio of deaths to the population. This has been proved by the publication of the Bills for 1838 and 1839.

It was also stated "That in the course of a few—a very few—years, the same cycle of disease would again revolve, and again would pestilence revisit the city." The Mortality Bill for 1839 corroborates the truth of this assertion, and an inspection of the preceding tables shews that the increased mortality of 1839 had fallen on the population under 10 years of age. The state of the infirmary now (16th Sept. 1840), proves that the mortality has extended to the more productive ages, and another epidemic is progressing without one single effort having yet been made to stay its progress; and, judging from the past, no measures will be taken until the epidemic reaches such a height as to defy our utmost efforts.

Mortality of the different Months and Seasons.—The number of deaths is influenced very materially by the seasons of the year. Numerous researches have been made upon the subject, and, as the result of these, it may be assumed that in our climate the winter months, in which the want of shelter, of fuel, of clothing, and of food is most severely felt, are by far the most fatal to human life. In London, prior to 1666, and before the improvements which were introduced in the width of the streets after the great fire, the months of August and September were the most unhealthy. It was in these months that plague and dysentery reached their greatest height. The plague has been unknown in London since 1679, and dysentery, which formerly carried off 2,000 per annum on an average of 25 years, during the last twenty years of the 18th century, numbers only, on an annual average, 30 victims; and the most fatal months in London are now January, February, and March.

To shew the influence of the seasons upon mortality in Glasgow, the following Table has been constructed. It exhibits the months in the order of their fatality, during two periods of nine years, ending respectively in 1830 and 1839; and it will be observed, that in the latter period several changes of position occur. The most remarkable of these is in the position of the month of August. From 1822 to 1830 August stood fourth in order of mortality; from 1831 to 1839 it stood second; and, had it not been for the extraordinary mortality from influenza in January 1837, it would have ranked as the most fatal month. In 1825-28-31-32 August was the month in which the mortality was greatest; it was second in 1834 and 1839. The prevalence of dysentery, diarrhoea, and cholera has been the cause of this extraordinary mortality in August. May has changed its relative situation from the prevalence of influenza in 1833, and, above all, from the mortality from fever during that month in 1837, being the month succeeding the great strike of the cotton-spinners, by which 8,000 individuals, chiefly females, were thrown out of employment. The deaths from fever rose in May to 1 in 3·223 of the total deaths in that month.

Table of Mortality of each of the Twelve Months for Eighteen Years, drawn from the Burials, the Number of the Still-born not having been given Monthly prior to the Year 1835.

Nine Years ending with 1830.		Nine Years ending with 1839.	
MONTHS.	Burials.	MONTHS.	Burials.
January	4,382	January	8,040
February	3,813	August	7,163
March	3,903	February	6,395
August	3,830	March	6,380
September	3,760	December	6,162
December	3,733	May	5,836
April	3,676	July	5,781
October	3,626	November	5,726
November	3,524	April	5,710
July	3,421	October	5,604
May	3,352	September	5,559
June	3,116	June	5,352
Total . .	44,133	Total . .	73,708
Still-born	3,273	Still-born	5,490
Under 5 Years . .	17,413	Under 5 Years . .	29,555
5 Years and upwards	23,452	5 Years and upwards	38,663
Total . .	44,138	Total . .	73,708

The mortality of the seasons is given below—

	Nine Years ending with 1830.		Nine Years ending with 1839.	
		Per Cent.		Per Cent.
Winter	11,639	26.37	19,928	27.03
Spring	11,394	25.81	18,475	25.07
Autumn	11,216	25.41	18,336	24.88
Summer	9,889	22.41	16,969	23.02
Total . .	44,138	..	73,708	..

Burials at the Public Expense.

In 1837 about 26.30 per cent. of the Burials were at the public expense.

1838 ,, 23.20 ,, ,, ,,
1839 ,, 21.66* ,, ,, ,,

The above statement is impressive; it connects poverty with mortality.

II.

It has been shewn in the preceding tables that the rate of mortality, always high in Glasgow, has increased most materially during the last nine years. It therefore becomes a question of some import-

* Mortality Bill, 1839, by Mr. Watt.

ance to ascertain upon what causes the high rate of mortality has all along depended, and to what influences the increased mortality of late years is to be ascribed.

The rapid increase in the amount of the labouring population, without any corresponding amount of accommodation being provided for them; the density, and still increasing density of that population; the state of the districts which it inhabits; the fluctuations of trade and of the prices of provisions, and the lamentable "strikes" in consequence of combination among the workmen, by which the means of subsistence have been suddenly withdrawn from large masses; the recklessness and addiction to the use of ardent spirits, at once the cause and the effect of destitution; the prevalence of epidemic diseases both among the adult and infantile portion of the community, have been the chief causes of the great mortality in the city of Glasgow.

During the last five years a diminished temperature and increased quantity of rain, aided by the high price of fuel, have tended to swell the lists of mortality, and probably other atmospheric phenomena, though not appreciable by scientific instruments, have also been in active operation.

Mr. Sadler, in his work on the "Law of Population," has examined the relations which exist between the number of marriages, births, and deaths, and found that those countries in which the marriages are most numerous are precisely those in which the mortality is greatest.

In the table exhibiting the ratio of marriages to the population in Glasgow, it will be seen that the proportion has been as high as 1 in 83, 1 in 92, 1 in 93 of the population, and that it is always much above the average of England or any of the Continental States.

For five years previous to 1831—

The average of England was	1 Birth in 37	Glasgow, in 1831, 1 in 29.47
"	1 Burial in 54	" 1 „ 30.91*
"	1 Marriage in 129	" 1 „ 105

While among the classes in easy circumstances the age of marriage is deferred from prudential motives, no such cause influences the labouring classes, who marry early and make no provision for their children; hence births and deaths follow each other in rapid succession, the death of one child, after existing for a few months, making way for the birth of another, each event increasing the poverty and recklessness of the parents, until at last they themselves either become the victims of epidemic fever, or swell the lists of applicants for relief from the poor's rates. The above is no fanciful picture, it is drawn from reality; and if the subject were investigated upon a large scale, it would be found as the results of the improvident marriages of the labouring classes, that the number of children born to them has been very great, while the number reared has been comparatively very small. The contrast between the labouring classes and those in easy circumstances, is in no particular so strongly marked as in the relative number of the births and deaths of their children. On an average of the last five years, the deaths under one year of age form 17.740 per cent. of the whole deaths.†

* Including still-born.

† Mortality Bill.

To the ordinary ailments of life, which are daily and hourly in operation in reducing the period of human existence, there have been added in numerous instances severe epidemics, affecting both the adult and infantile population, and to these we shall now direct attention. The first disease of which I shall attempt to give the statistics is "Fever." The Royal Infirmary of Glasgow for the reception of medical and surgical patients, was opened in the month of December 1794, and contained accommodation for 150 patients. An addition was made to it in 1816, capable of containing 80 beds. One-half of the fever hospital attached to the infirmary was opened in 1829, and the other in 1832; and with some additional accommodation since afforded, the whole can now receive 220 patients.

The permanent hospital accommodation was—

From 1795 to 1816	. . .	150	beds.
1816 „ 1829	. . .	230	„
1829 „ 1832	. . .	330	„
1832 to the present time		450	„

But besides this permanent hospital accommodation, it has on various occasions been absolutely necessary to provide temporary hospitals, and also to appropriate apartments within the infirmary for the reception of fever patients, which apartments were never intended for such purposes. These demands for additional room have been solely caused by the prevalence of typhus fever, with the exception of the hospitals required in 1832 for the reception of patients affected with cholera.

In 1818 a temporary fever hospital, fitted to contain 200 patients, was erected at Spring Gardens by public subscription. It was opened on the 30th March 1818, and closed on the 12th July 1819. This hospital was again opened in 1827 at the expense of the infirmary, and kept open for five months. In 1828 a temporary booth, capable of containing 68 patients, was erected in the infirmary grounds. A fever hospital, with 135 beds, was opened at Mile-End on the 9th January 1832, and closed in the same year. A fever hospital, capable of containing 60 patients, was opened in Albion-street on 1st March 1837, and appropriated to the reception of males: it was closed 14th April 1838.

Notwithstanding the above amount of hospital accommodation, that portion of it allotted for the reception of fever patients has on various occasions, been found insufficient, and numerous applicants for admission have been thrown back upon their own resources, left to spread the contagion of typhus around their miserable dwellings, thereby augmenting the sum of human misery already existing in its most appalling forms.

The first of the following tables exhibits the total number of patients treated in the Royal Infirmary, from its opening in December 1794 to the 1st January 1840, distinguishing the number of fever patients treated each year. The second table shews the numbers treated in the temporary fever hospitals of Spring Gardens and Mile-End in 1818-19 and 1832. Those admitted into the hospital at Spring Gardens in 1827, and into the Albion-street Hospital in 1837-38, having been treated at the expense of the infirmary, were of course included in the infirmary returns.

Table of the Total Number of Patients treated in the Glasgow Royal Infirmary, distinguishing the Number of Fever Patients, in each Year from 1795 to 1839.

Years.	Total.	Fever Patients.	Total.	Fever Patients.	Years.	Total.	Fever Patients.	Total.	Fever Patients.	Years.	Total.	Fever Patients.	Total.	Fever Patients.
1795	226	18	2,309	317	1800	733	104	3,648	453	1805	719	99	3,871	302
1796	338	43			1801	702	63			1806	700	75		
1797	545	83			1802	729	104			1807	726	25		
1798	569	45			1803	806	85			1808	840	27		
1799	631	128			1804	678	97			1809	886	76		
1810	935	82	4,795	268	1815	1,340	230	8,887	3,344	1820	1,570	289	8,470	1,544
1811	826	45			1816	1,511	399			1821	1,454	234		
1812	877	16			1817	1,886	714			1822	1,596	229		
1813	1,022	35			1818	2,289	1,371			1823	1,759	269		
1814	1,135	90			1819	1,861	630			1824	2,091	523		
1825	2,438	897	12,934	5,283	1830	2,010	729	15,128	7,266	1835	3,260	1,359	23,911	13,447
1826	2,317	926			1831	3,183	1,657			1836	5,130	3,125		
1827	2,725	1,084			1832	2,974	1,589			1837	7,200	5,387*		
1828	3,133	1,511			1833	3,082	1,288			1838	4,153	2,047		
1829	2,321	865			1834	3,879	2,003			1839	4,168	1,529		

* Including 906 male fever patients treated in Albion-street temporary Hospital, at the expense of the Infirmary.

Table exhibiting the Number of Fever Patients admitted into the Temporary Fever Hospitals at Spring Gardens and Mile-End.

Spring Gardens in 1818-19	1,929	} 3,074
Mile-End „ 1832	1,145	

From 1795 to 1809, being a period of 15 years, the fever patients are 10·90 per cent. of the whole number of patients treated in hospital.

From 1810 to 1824	23·27
1825 „ 1839	50·01
In the Year 1837	74·81

The hospital accommodation was inadequate in 1819, 26·27, 31, and 36·37. From 1827 to 1840, 9,665 patients were treated in their own houses by the district surgeons of the burgh.

Table shewing the Number of Fever Patients treated in Hospital at various periods, and their Ratio to the Population.

YEARS.	Population.	Fever Patients.	Ratio of Fever Patients, treated in Hospital, to Population.	REMARKS.
1801	83,769	69	1 in 1214·04	{ No adequate Hospital accommodation. Ditto.
1811	110,460	62	„ 1781·61	
1821	147,043	929	„ 158·28	
1831	202,426	1,093	„ 184·35	
1835	235,000	1,359	„ 172·92	
1836	244,000	3,125	„ 78·08	Ditto.
1837	253,000	5,387	„ 46·7	
1838	263,000	2,047	„ 128·48	
1839	272,000	1,529	„ 177·89	

Table of the Number of Fever Patients in Hospital during the last 45 Years.

From 1795 to 1799, both inclusive	317	1,072	35,298
1800 „ 1804 „	453		
1805 „ 1809 „	302		
1810 „ 1814 „	268	7,085	
1815 „ 1819 „	5,273		
1820 „ 1824 „	1,544		
1825 „ 1829 „	5,283	27,141	
1830 „ 1834 „	8,411		
1835 „ 1839 „	13,417		

The above number of fever patients has been drawn from the city and suburbs of Glasgow, with the addition of a very small proportion from the surrounding neighbourhood. But, in addition to the number treated in the permanent and temporary hospitals, the next table exhibits the number of fever patients, who, for a period of 12 years, have been treated by the district surgeons, within the burgh, at the public expense; distinguishing the number sent by those gentlemen to the hospitals. All the patients so treated may be considered as paupers, since before they are attended by the district surgeons, a certificate is required from the Elder of their district, certifying that they are unable to pay for medicines and advice; and the salaries of the surgeons and the cost of the medicines prescribed are paid out of the poor's-rates. It must be remembered that all the patients included in this table reside within the burgh, the population of which, at the census of 1831, was 89,847, of whom 12,554 were Irish; while the suburbs contained 112,579, of whom 23,000 were Irish; making a total population of 202,426, among whom were 35,554 Irish.

No effective measures have yet been taken to place the indigent poor of the suburbs under a system of medical superintendence, similar to that within the burgh, though the necessity for it must be apparent from the above statement.

Table exhibiting the Number of Cases of Fever treated by the District Surgeons, from 1 Aug. 1827 to the 1 Aug. 1832, in the four years from 1833 to 1836; and from 1 Nov. 1836 to 1 Nov. 1839; distinguishing the numbers sent to the Infirmary, and treated in their own houses.

YEARS.	Number of Cases.	Sent to the Infirmary.	Treated at Home.	YEARS.	Number of Cases.	Sent to the Infirmary.	Treated at Home.
1827-28	1,281	281	1,000	1835	542	215	327
1828-29	1,730	390	1,340	1836	1,359	643	716
1829-30	485	135	350	1837	3,331	1,049	2,282
1830-31	898	306	592	1838	1,327	456	871
1831-32	1,428	336	1,092	1839	466	166	300
1833	681	294	387	Total	14,464	4,809	9,655
1834	936	538	398				

Such is the melancholy catalogue of fever patients treated in the hospitals of Glasgow, and in their own houses, by the district surgeons of the burgh, exclusive of the suburbs.

The next table exhibits the deaths from fever within the Bills of Mortality, including both the city and suburbs, and, founded upon these, an estimate of the total number of fever cases during the last five years.

Table of the Deaths from Fever recorded in each Year, from 1835 to 1839.

1835	412, being 1 to 15·571 of the deaths, and 1 to 570·388 of the population
1836	841 „ 10·036 „ 290·130 „
1837	2,180 „ 4·711 „ 116·055 „
1838	816 „ 8·495 „ 322·303 „
1839	539 „ 13·961 „ 504·633 „

Total 4,788

The total number of deaths recorded to have taken place from fever during the last five years, amount to 4,788; a number certainly not over stated, when we reflect that the deaths from diseases not ascertained amount, during the same period, to 1,998, being 4·949 per cent. of the whole deaths.

Upon the assumption that the rate of mortality from fever was 1 in 15 of those attacked in 1835; 1 in 12 in 1836; 1 in 10 in 1837; 1 in 12 in 1838; and 1 in 15 in 1839; which calculations will be found nearly correct, the number of individuals who have been affected with fever in Glasgow during the last five years will be as follows:—

In 1835	6,180	} 55,949
1836	10,092	
1837	21,800	
1838	9,792	
1839	8,085	

The mind cannot contemplate without horror the amount of human misery which the above statement so forcibly exhibits.

Of the above number of 55,949 cases of fever, there have been treated in hospitals 13,447; and in their own houses, at the public expense, in the city (exclusive of the suburbs) 4,496; total at the public expense, 17,943; while, from want of hospital accommodation, and want of proper medical superintendence, many have perished miserably whom “food, fuel, and clothing,” would, in all human probability, have saved.

Table of the Deaths from Fever in each Month, distinguishing the Males and Females, and giving the Monthly Proportion which the Deaths from Fever bear to the whole number of Deaths, in each Year from 1836 to 1839.

MONTHS.	1836			1837			1838			1839		
	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.	Male.	Fem.	Total.
January	31	14	45	108	93	201	86	78	164	10	11	21
February	16	11	27	77	61	138	68	67	135	14	17	31
March	33	24	57	124	100	224	76	48	124	20	12	32
April	27	37	64	114	88	202	53	42	95	17	13	30
May	39	28	67	120	113	233	40	33	73	24	11	35
June	38	33	71	109	90	199	21	15	36	24	17	41
July	31	30	61	106	88	194	11	22	36	22	20	42
August	51	31	82	101	71	172	24	18	42	13	16	29
September	32	24	56	73	53	126	10	17	27	22	16	38
October	52	37	89	74	75	149	20	10	30	27	40	67
November	42	47	89	83	64	147	10	15	25	53	30	83
December	73	60	133	98	97	195	17	12	29	54	36	90
Total	465	376	841	1187	993	2180	349	377	816	300	239	539

The Preceding Table continued.

MONTHS.	1836	1837	1838	1839
	Proportion to whole Deaths.	Proportion to whole Deaths.	Proportion to whole Deaths.	Proportion to whole Deaths
January. .	1 in 17·55	1 in 9·81	5·481	26·380
February .	,, 24·74	,, 7·13	6·229	19·419
March . .	,, 11·82	,, 4·20	5·782	20·031
April . .	,, 10·00	,, 4·08	6·031	20·400
May . . .	,, 10·29	,, 3·22	7·301	15·542
June . . .	,, 8·91	,, 3·34	12·055	13·390
July. . .	,, 11·14	,, 3·67	11·416	15·500
August . .	,, 8·89	,, 4·93	10·928	24·586
September .	,, 11·46	,, 5·11	17·555	15·078
October . .	,, 7·71	,, 3·79	16·500	9·373
November .	,, 8·86	,, 4·28	19·960	8·048
December .	,, 6·15	,, 3·73	20·586	8·777

Deaths of Males, 2,391 ; Females, 1,985 :—Total Deaths, 4,376.

Many interesting observations may be drawn from this table. It shews the slow progress of an epidemic disease when trade is prosperous, compared with what occurs in seasons of distress. Up to November 1836, the period at which the commercial embarrassments were felt, the mortality from fever had not been rapidly increasing. In November it was just about double what it had been in the January preceding, the number of deaths being 45 in January, and 89 in November. The moment, however, that the effects of the stagnation in trade extended to the working classes, the mortality increased with fearful rapidity, aided, no doubt, by the season of the year, the high price of grain, and the scarcity or high price of fuel. The deaths from fever in the four months preceding the 1st December 1836 were 316 ; in the four months following, 696.

The table also marks the period at which the epidemic reached its maximum amount of mortality, namely, in the second quarter of 1837, and in the month of May in that quarter, being the month succeeding that in which the strike of the cotton-spinners took place, by which 8,000 individuals were thrown out of employment.

The establishment of soup-kitchens, and the provision of work for the unemployed operatives in the months of May, June, and July, must have materially aided in arresting the progress of the epidemic.

Many expect that fever is to subside suddenly, but an examination of the above table and of the Mortality Bill for 1838, will prove the fallacy of such opinions by exhibiting a gradual diminution in the numbers attacked.

The table also exhibits the relative proportion of male and female deaths from fever, in the four years from 1836 to 1839 ; to which has been added, in the next statement, a similar account for 1835. During the last five years the deaths of males from fever have been 54·49 per cent., and of females 45·51 per cent., of the whole deaths from fever. While the mortality of the males from fever has in each year exceeded that of the females, it has done so in a variable proportion, as will be seen from the following Table :—

Table of the Per-centage of the Deaths of Males and Females from Fever.

Years.	Males.	Females.
1835	52.93	47.08
1836	55.29	44.70
1837	54.44	45.55
1838	53.79	46.21
1839	55.65	44.35

The above table and the Mortality Bills confirm the opinion formerly given founded upon the statistics of the fever hospital, that mortality from fever, at every period of life, is greater among males than among females.

III.

Fever Hospital.—Of 5,014 patients treated in the fever hospital by Doctors Cowan and Anderson, in the five years from 1835 to 1839, there were—

	Scotch.	English.	Irish.	Total.
Males . . .	1,685	58	734	2,477
Females . . .	1,848	28	661	2,537
Total . . .	<u>3,533</u>	<u>86*</u>	<u>1,395</u>	<u>5,014</u>

Of the above admissions into the fever hospital—

The Scotch form	70.46 per cent.
English	1.72 „
Irish	27.82 „

The proportion of Irish treated in the fever hospital is much less than what is generally believed by those who have not paid attention to the subject.

Dr. Lombard, of Geneva, estimates the number of Irish resident in Glasgow at 60,000, and ascribes the prevalence, and what he deems the peculiarities of our fever, to their presence in such large numbers.† The author of the article “Vital Statistics,” in M'Culloch's Statistics of the British Empire, vol. ii. p. 527. makes the following remarks:—“The increasing mortality in Glasgow is, no doubt, in part due to the accession of Irish population, who amounted in 1831 to more than one-sixth of the inhabitants. The poor Irish, we strongly suspect, are keeping up, if they be not introducing, the fevers of their wretched country in the heart of the British cities. This is confirmed in the case of Glasgow, by the ages at which the mortality is augmented, and by a Report of the Glasgow Infirmary before us, from which it appears that in the year 1835, out of 3,260 patients treated, 1,258 had fevers, and of these 125 died.” The Irish in Glasgow belong almost entirely to the labouring classes, and so far they must, from their numbers, have increased the number of fever patients; but, from ample opportunities of observation, they appear to me to exhibit much less of that squalid misery and habitual addiction to the use of ardent spirits than the Scotch of the same grade.

Of the patients sent into the fever hospitals, some are labouring under small-pox, scarlet fever, measles, and others have ailments mistaken for fever before admission. The following Tables refer solely to those patients labouring under fever:—

* Including 12 foreigners.

† Dublin Medical Journal for September 1836.

Table exhibiting the Ages of the Fever Patients.

AGES.	MALES.				FEMALES.			Total.
	Dr. Cowan.	Dr. Anderson.	Dr. Weir.	Total.	Dr. Cowan.	Dr. Anderson.	Total.	
From 1 to 5	10	13	..	23	31	7	38	61
5 ,, 10	92	80	76	248	99	58	157	405
10 ,, 15	149	137	102	388	169	124	293	681
15 ,, 20	229	187	161	577	272	273	545	1,122
20 ,, 25	237	212	206	655	188	233	421	1,076
25 ,, 30	132	153	135	420	158	144	302	722
30 ,, 35	84	116	107	307	60	120	180	487
35 ,, 40	80	85	79	244	85	84	169	413
40 ,, 45	39	73	71	183	23	69	92	275
45 ,, 50	39	38	29	106	27	31	61	167
50 ,, 55	12	17	26	55	9	25	34	89
55 ,, 60	7	11	9	27	15	5	20	47
60 ,, 65	3	13	2	18	3	4	7	25
65 ,, 70	1	7	1	9	1	4	5	14
70 ,, 75	2	1	2	5	1	3	4	9
Unknown . .	..	5	..	5	..	7	7	12
Total . .	1,116	1,148	1,006	3,270	1,141	1,194	2,335	5,605

Mortality from Fever.

AGE.	MALES.			FEMALES.			TOTAL.		
	Treated.	Dead.	Per-centage Mortality.	Treated.	Dead.	Per-centage Mortality.	Treated.	Dead.	Per-centage Mortality.
Under 5 Years	23	3	13·04	38	2	5·26	61	5	8·19
5 & under 10	247	5	2·02	157	7	4·45	404	12	2·97
10 ,, 15	388	12	3·09	293	14	4·77	681	26	3·81
15 ,, 20	577	43	7·45	544	34	6·25	1,121	77	6·86
20 ,, 25	654	64	9·78	421	31	7·36	1,075	95	8·83
25 ,, 30	419	71	16·94	300	29	9·66	719	100	13·90
30 ,, 35	301	57	18·93	176	23	13·06	477	80	16·77
35 ,, 40	241	75	31·12	168	22	13·09	409	97	23·71
40 ,, 45	183	51	29·50	91	24	26·37	271	78	28·46
45 ,, 50	102	41	40·19	60	17	28·33	162	58	35·80
50 ,, 55	55	16	29·09	34	9	26·47	89	25	28·08
55 ,, 60	26	12	46·15	18	7	38·88	44	19	43·40
60 ,, 65	17	5	29·41	7	2	28·57	24	7	29·16
65 ,, 70	8	6	75·00	5	3	60·00	13	9	69·23
70 ,, 75	4	3	75·00	4	..	..	8	3	37·50
Unknown .	1	1	100·00	6	2	33·33	7	3	42·85
Total .	3,246	468	14·41	2,322	226	9·73	5,568	694	12·46
Dead within } 24 hours . }	24	24	or 1 in 7	13	13	or 1 in 10	37	37	or 1 in 8
Total .	3,270	492	15·04	2,335	239	10·23	5,605	731	12·90

Contagion.—Of the whole number of fever patients treated—

By Dr. Cowan 47·
 Dr. Anderson 45·3
 Dr. Weir 44·8

} per cent., either ascribed the origin of
 their disease to contagion, or had been
 exposed to its influence.

The average residence of Dr. Cowan's patients in hospital was 18 days.

In the existing epidemic fever, an exanthematous eruption is present in a vast majority of the patients admitted into the hospital. This eruption generally makes its appearance from the fourth to the ninth day of the disease; occasionally, according to my own observations and those of Chomel, appearing at a later period.

Table of Fever Patients with and without Eruption.

	WITH ERUPTION.			WITHOUT ERUPTION.			Doubtful.
	Males.	Females.	Total.	Males.	Females.	Total.	
Dr. Cowan .	850	819	1,669	266	322	588	..
Dr. Anderson	..	..	1,885	..	..	324	143
Dr. Weir .	643	..	648	358	..	358	..
Total . .	1,498	819	4,202	624	322	1,270	143

Of the comparative mortality of patients, with and without eruption, I have no table. The following was drawn up by Dr. Anderson, to whom I am indebted for it. It exhibits, however, neither the ages nor the sexes.

Of 1,885 patients with eruption there died 275, being 14·58 per cent.

324 ,, without ,, 11 ,, 03·39 ,,
 143 ,, eruption doubtful ,, 7 ,, 04·89 ,,

During the period of Dr. Cowan's attendance on the fever hospital every applicant was admitted. During Dr. Anderson's, numbers were refused admittance from want of room; and during the last nine months, the period of Dr. Weir's attendance, every applicant has been again accommodated.

From the tables it appears that the rate of mortality depends upon the age and sex of those admitted; and hence arises the absurdity of contrasting the mortality of different hospitals, and of different practitioners, when we have not before us the data to enable us to form a competent decision.

IV.

It has been already stated that the burgh, exclusive of the suburbs, is divided into 12 districts, to each of which a medical practitioner is appointed, who is paid for his services out of the poor's-rates. In the accompanying Map of the city and suburbs,* the burgh divided into

* This Map is necessarily omitted, but the following description of the several districts will explain the divisions to those persons who are acquainted with the town. The divisions of these districts are not parochial but arbitrary; their popu-

districts is exhibited, and the number of cases treated by the medical practitioners in each district during the last three years, distinguishing the number of fever patients, is given in the following Table :—

Districts.	Total Cases.	Fever Cases.	Districts.	Total Cases.	Fever Cases.
No.			No.		
1	1,269	507	8	1,431	480
2	1,241	423	9	1,256	369
3	2,386	718	10	1,276	431
4	923	354	11	1,026	256
5	928	382	12	824	308
6	1,240	285			
7	1,805	611	Total	15,605	5,124

From the above table it appears that about 33 per cent. of the patients treated by the district surgeons are fever patients, exclusive of scarlet fever, measles, and small-pox. The latter epidemics, being the diseases of children, are not generally attended to, as appears from Mr. Connell's return for 1836-7; and what is still more striking, when we take the mortality of small-pox into account, it is no part of the duty of the district surgeons to vaccinate the children of the poor.*

An inspection of the Map shews how small and how densely crowded is the space on which the largest portion of the fever patients are located. Districts Nos. 1, 2, 3, 4, and 8, share among them 2,739 of the

lation therefore cannot be defined, but the burgh certainly does not contain more than 110,000, while the suburbs contain 162,000.

No. 1 contains the east side of the Salt-market and south side of the Gallowgate, as far as the boundary of the city and Calton. Nearly all the fever cases in it are drawn from the Salt-market and Gallowgate.

No. 2 contains the west side of the Salt-market, the east side of King-street, and the south side of Bridgegate.

No. 3 the Wynds of Glasgow, described by Mr. Symonds in his Report on the State of the Hand-loom Weavers.

No. 4 includes all the burgh to the west of Stockwell-street, bounded by the river and Argyle-street: a large district, better ventilated, &c. &c.

No. 5, Suburban, to the east of Glasgow; large; houses not crowded.

No. 6 contains north side of Gallowgate, bounded on the west by Molendinar Burn, which in this district is a large open common sewer; district not crowded, except in Gallowgate.

No. 7. Vennals of Glasgow. District small; houses crowded; bounded by the Molendinar Burn, which occasionally inundates houses on its banks. This district is the worst in the town since public attention has been directed to the Wynds.

No. 8. Bounded by the Molendinar Burn, Gallowgate, Trongate, Nelson-street, Bell-street, High-street, and street opened through College-garden.

No. 9. Bounded by Trongate, Argyll-street, Mitchell-street, West Nile-street, George's-street, High-street, Bell-street, and Nelson-street. Extensive.

No. 10. Bounded by Duke-street, High-street, and extending into the country. Patients from Duke-street, High-street, Drygate, Ladywell, &c.

No. 11. A large district; houses recently built; inhabitants employed.

No. 12. Ditto.

* The duties of the district surgeons are laborious and dangerous. Nearly all of them take fever, which involves a heavy pecuniary loss. Their salary is 21*l.* per annum, being less than 1*s.* for the treatment of each case. The comparatively small number of children's diseases treated arises from the circumstance of the parents not applying to the district surgeons.

total number. The district in which the College is situated, the smallest in the Map, is by far the most wretched. This opinion is based upon the number of the fever patients in it; and it is also corroborated by the practical experience of Captain Miller, the head of the Glasgow Police.

During the prevalence of cholera, and indeed of all epidemics, the same districts are the most unhealthy, and are always the most distinguished in the annals of crime and pauperism.

V.

Influenza.—Epidemic catarrh, or influenza, visited this city in the month of December 1836, but its effects on the Mortality Bill were barely perceptible till the month of January 1837. It continued to prevail during February and the first weeks of March, but in a modified degree. In April the deaths from influenza were only 13. The total number of deaths recorded from catarrh (influenza) in 1837, amounted to 389, of which 229 took place in January, proving that the great force of the epidemic was expended during that month. The deaths in the month of January were 1,972, being an increase of 1,182 over the month of January 1836; and of 1,153 over the month of December immediately preceding.

The following Table shews the recorded deaths from catarrh (influenza) during the months of January, February, and March, distinguishing males from females.

1837	Males.	Females.	Total.
January . .	111	118	229
February . .	37	62	99
March . .	9	20	29
<hr/>			
Other Months	157	200	357
	16	16	32
Total .	173	216	389

The above table proves that the influenza, unlike fever, was more fatal to females than to males; the deaths of the former being 55·52 per cent., and of the latter only 44·47 per cent. of the deaths from influenza: but notwithstanding this, the total number of deaths, during the prevalence of influenza, bore the same relative proportion of the sexes as usual; the male deaths being 1,023, and the female 949, in January; and in February, 489 males, and 495 females.

It is quite obvious that the deaths recorded from catarrh (influenza) in January, do not nearly account for the increased mortality of that month. It will therefore be necessary to give a table of the number who died in January and February 1837, with their ages and the diseases of which they died, and to compare this statement with a similar one for January and February 1836, noting the increase or decrease under each disease, and at each age.

The foregoing table for January shews that the mortality from all diseases (with the exception of scarlet fever, which exhibits a diminution of 54), had materially increased, when compared with that of the corresponding month in the previous year; and that, while the number recorded dead from catarrh (influenza) as a primary disease was only 229, the effects of the epidemic were severely felt by the aged, the asthmatic, and the consumptive, the deaths under these heads being 706, shewing an increase of 473 upon 233, the number in January 1836. The epidemic influence produced bowel complaints in the young, the deaths from these ailments being doubled over those of January 1836; and of 143 deaths from bowel complaints, 136 took place under 5 years of age, and only 7 above it. The deaths in child-birth in 1837 were 93 in number, being an increase of 16 over the previous year; but owing to the great diminution in the number of births during 1837, the increased rate of mortality in child-birth was in truth much greater than the above numbers indicate. Of the 93 deaths in child-birth during 1837, 25 occurred in January, being upwards of one-fourth of the whole number during the year.

The table for February shews a remarkable diminution in the rate of mortality, as compared with January, but a very considerable increase over February 1836. The decrease is principally, as in January, in the number of deaths from scarlet fever (27), leaving on the whole an increase of 316 over February 1836. This increase chiefly arises from fever (111), catarrh (96), old age (26), decline (15), hooping-cough (17), &c. It is not deemed necessary to give any table for March, as the epidemic had nearly abated early in that month.

To prove the influence of the epidemic catarrh (influenza) in augmenting the rate of mortality, the following Table of the Rate of Mortality is given from November 1836 till May 1837:—

1836, November . . .	1 in 25·34 of the population.
December . . .	1 ,, 25·23 ,,
1837, January. . .	1 ,, 10·89 ,,
February . . .	1 ,, 19·72 ,,
March . . .	1 ,, 22·78 ,,
April . . .	1 ,, 25·17 ,,
May . . .	1 ,, 23·61 ,,

VI.

Diarrhœa, Dysentery, Cholera.—The number of patients affected with diarrhœa, dysentery, and cholera, treated in the Royal Infirmary, from its opening in 1795 to the year 1827, was very small indeed, not amounting to more than 354. In 1827 diarrhœa and dysentery may be considered to have been epidemic in Glasgow, especially during the autumnal months. During 1827 and 1828, 214 individuals with dysentery were admitted into the Infirmary, and of these 1 in 8 of the males, and 1 in 10 of the females, died.* The disease abated in frequency and severity during 1829 and 1830, which last year was remarkably healthy.

Cholera.—Although cases of epidemic cholera had been known to occur previously to the 13th February 1832, its existence was first offi-

* Infirmary Report.

cially announced by the Board of Health on that day. It continued to prevail in the city and suburbs for nine calendar months, and attacked, according to the Returns made to the Board of Health, 6,208 individuals; the deaths, according to the Mortality Bills, amounted to 3,166. During the whole period of the continuance of cholera, diarrhœa was very prevalent among all classes, but among those in comfortable circumstances it was easily checked. To shew the effects of cholera upon the population, it may be stated that 1 out of every $32\frac{1}{2}$ persons were attacked by it, and 1 in $67\frac{1}{2}$ died of it.*

In order to exhibit the mortality there is a table given of the mortality at every age distinguished in the Bills for 1831, 1832, and 1833, pointing out the increase of deaths at each period of life in 1832, and also the number of deaths of each sex at each age from cholera.

It has been stated by many authors that epidemics do not increase the annual mortality, that they only absorb other diseases; and this assertion was made repeatedly during the progress of cholera towards Britain. A comparative view of the mortality in the corresponding months of the previous year, with those in which cholera first prevailed in Newcastle, Gateshead, Musselburgh, and some parishes in London, was not sufficient to remove the delusion. The Table now given shews the additional mortality in Glasgow over the previous year, which was a very sickly season, to have been 3,731, of which increase 3,166 were from cholera, and 565 from other diseases, raising the mortality from 6,547 in 1831 to 10,278 in 1832, and from the rate of 1 in 33·84 in 1831 to 1 in 21·67.

The number of female deaths from cholera, according to the Mortality Bills, exceeded that of the male deaths to the extent of 328, thereby nearly equalising for the year the male and female deaths, for (exclusive of the still-born) the deaths of males during 1832 amounted to 4,811, and those of females to 4,843.

Mr. Finlayson affirms that the mortality of the female sex, at every period of life, is less than that of the male at a corresponding age, excepting under 10, when there is no difference, and above 85, when he perceives no distinction;† but M. Villermé affirms, with greater truth, that at almost every age, especially the few years after birth, females die in a smaller proportion than males. "It will be curious," he adds, "to ascertain if, in the respective numbers who fall a prey to epidemic diseases, the female sex is usually spared, particularly in the first months of their existence." If it is so, it will afford another proof that the mortality peculiar to epidemics follows the general law of mortality. With the exception of epidemic chin-cough, which he states to be more fatal to females, he says he is ignorant of any facts respecting the difference of mortality in the two sexes caused by epidemics.‡

The mortality in Glasgow at each stage of early life, indeed under 50, is on the average uniformly greater among males than among females, but from cholera the female deaths, at every period of life, exceeded the male, with two exceptions, *viz.*, under 2 years of age, when they were as 22 to 25, and at 85, when they were as 2 to 9.

* Cleland, Mortality Bill, 1832.

† Hawkins' Statistics, p. 207.

‡ Annales d'Hygiène.

In 1832 the relative proportion of the deaths under 10 years of age to the whole deaths was altered, in consequence of the increased mortality falling more heavily upon the classes above that age. 971 was the increased amount of mortality of the year under 10 years of age, and 2,760 above that age. A reference to the Table will indicate the ages which suffered most.

The Table of the Monthly Mortality proves that July, August, and September, the very months in which epidemic diseases were formerly so prevalent, were also those in which the greatest number of cases of cholera, and the greatest number of deaths, took place in Glasgow. Of 10,278 burials, 1,755 occurred in August, being more than one-sixth of the total number of burials; and of the 6,208 cases of cholera, 2,418 originated in August; while of 3,166 deaths from this disease, 1,222 took place in that month.

Table exhibiting the Mortality in Glasgow in the Years 1831, 1832, and 1833, with the Increase of Deaths in 1832 at each Period of Life; and the Number of Deaths from Epidemic Cholera at each Age, distinguishing the Sexes.

AGES.	1831	1832	Increase in 1832.	Cholera in 1832.	1833	Deaths from Cholera in 1832.	
						Males.	Females.
Still-born . .	566	624	58	..	582	..	..
Under 1 Year .	1,219	1,326	107	18	1,251	10	8
1 and under 2	755	973	218	29	730	15	14
2 " "	5	565	428	83	826	40	43
5 " "	10	265	160	106	291	50	56
10 " "	20	322	111	132	295	61	71
20 " "	30	426	443	358	432	136	222
30 " "	40	455	524	529	451	235	294
40 " "	50	461	576	639	441	284	355
50 " "	60	463	450	556	406	263	293
60 " "	70	477	350	444	401	207	237
70 " "	75	238	138	155	217	61	91
75 " "	80	130	133	62	127	25	37
80 " "	85	127	14	44	119	20	24
85 " "	90	51	17	11	46	9	2
90 " "	95	16	9	..	16	..	..
95 " "	100	9	..	..	1	..	..
	100	1	..	..	..	..	..
	103	1	1	..	..	..	..
Total .	6,547	10,278	3,731	3,166	6,632	1,419	1,747

The following Table, extracted from the Mortality Bill for 1832, gives the number of deaths from cholera in each month:—

January . . . .	..	August	1,222
February	87	September	243
March	264	October	334
April	229	November	25
May	125		
June	196	Total .	3,166
July	411		

VII.

EPIDEMICS OF CHILDREN.

1. *Small-pox*.—The following Table exhibits the total number of deaths under 10 years of age, in Glasgow, distinguishing those from small-pox, for 30 years, divided into three equal periods; and is compiled from tables prepared from the registers of this city, by the late Dr. Robert Watt, and published in the Appendix to his work on Chin-cough.

Years.	Total.	Small-Pox.	Years.	Total.	Small-Pox.	Years.	Total.	Small-Pox.
1783	719	155	1793	1,126	389	1803	940	194
1784	877	425	1794	759	235	1804	863	213
1785	744	218	1795	1,048	402	1805	884	56
1786	941	348	1796	797	177	1806	786	28
1787	1,016	410	1797	884	354	1807	899	97
1788	1,059	399	1798	864	309	1808	1,775	51
1789	1,058	366	1799	1,105	370	1809	1,187	159
1790	1,236	336	1800	746	257	1810	1,027	28
1791	1,367	607	1801	766	245	1811	1,274	109
1792	902	202	1802	985	156	1812	1,278	78
1st period	9,919	3,466	2nd period	9,080	2,894	3rd period	10,913	1,013

The ravages of small-pox were never before more vividly illustrated than in the foregoing table. In the first decennial period, the total deaths under 10 years of age amounted to 9,919, and the deaths from small-pox to 3,466, being 35 per cent., and rather more than one-third of the whole deaths under 10. In the second period, the total deaths under 10 were 9,080, and the deaths from small-pox 2,894, or 31·87 per cent.; and in the last period, the total deaths under 10 were 10,913, and the deaths from small-pox 1,013, or only 9·28 per cent. The saving of human life in infancy by the introduction of vaccination is thus most satisfactorily established, as the table shews an improvement to the extent of 25 per cent., and if to this be added the lives saved above 10 years of age, which we have no means of exhibiting from the Glasgow Mortality Bills, we shall be able to judge of the benefits conferred on society by Jenner.

I am not aware that small-pox has been so fatal in any town as it appears to have been in Glasgow. In Berlin, the deaths from small-pox were for a short time as 1 in 4, but more generally as 1 in 7, of the whole deaths under 10 years of age; while in the city and suburbs of Glasgow, it was fatal in the proportion of 1 in 3 of the deaths under 10 years, and that not for one or two years merely, but for a long period.

The great saving of human life is rendered apparent from the third period embraced in the table. Up to the very moment of small-pox inoculation being superseded by cow-pox the mortality is immense, and the instant the latter is employed, the mortality becomes comparatively trifling.

From 1812 to the publication of the Mortality Bill for 1835, there was no statement made of the number of deaths which annually took place from small-pox. From the increased rate of mortality of late years, and the period of life at which the augmented mortality has taken place, I have for a long time expressed the opinion that small-pox has

been prevailing to a greater extent than has been generally supposed. This must remain a matter of conjecture for the period prior to 1835, unless some person, possessing the persevering industry of Dr. Watt, will attempt the task of completing his tables from 1812 to 1835.

The following Table gives the deaths from small-pox, according to the Mortality Bills for the five years from 1835 to 1839, but it does not include the whole of them, as the causes of death were not ascertained in many instances; and at the Tollcross burying-ground, in which the interments in 1835 and 1836 amounted to 645, the diseases have not been recorded.

Table of the Deaths from Small-pox, 1835 to 1839.

Years.	AGES.								Total.
	Under 1 Year.	1-2	2-5	5-10	10-20	20-30	30-40	Above 40	
1835	204	154	75	17	14	8	1	..	473
1836	202	174	144	23	6	24	2	2	577
1837	93	116	94	24	10	11	4	..	352
1838	111	99	119	28	11	14	4	2	388
1839	137	98	113	19	15	17	5	2	406
Total	747	641	545	111	56	74	16	6	2,196

The annual average number of deaths under 10 years of age, for ten years prior to 1812, from small-pox, was 101, while, during the last five years, they have amounted to 2,196, being at the rate of 439 per annum.

Table shewing the Number of Patients with Small-pox annually admitted into the Glasgow Royal Infirmary, from 1795 to 1839.

Years.	No.	Years.	No.	Years.	No.	Years.	No.	Years.	No.	Years.	No.
1795	4	1803	..	1811	..	1819	7	1826	1	1833	14
1796	2	1804	1	1812	4	1820	..	1827	25	1834	62
1797	4	1805	3	1813	2	1821	33	1828	4	1835	72
1798	9	1806	1	1814	2	1822	5	1829	1	1836	110
1799	..	1807	5	1815	4	1823	46	1830	10	1837	*
1800	1	1808	..	1816	14	1824	37	1831	12	1838	35
1801	1	1809	10	1817	7	1825	3	1832	3	1839	59
1802	..	1810	2	1818	11						
	21		22		44		131		56		352

This table shews a progressive increase in the number of patients with small-pox admitted into the infirmary for some years past, and also how small a proportion of the adult population was admitted during the years in which, as appears from the first table, small-pox was annually carrying off hundreds under 10 years of age.

Of the 110 patients treated in the Infirmary in 1836, 95 came under my charge; and the next table gives the sex, nation, and district of each patient, with the proportion vaccinated, and the number of deaths. The patients, with three exceptions, were adults.

* The number of patients with small-pox was not stated in the Infirmary Report for 1837, but would probably be from 50 to 60.

	Highlanders.	Lowlanders.	Irish.	Total.
Males	34	11	4	49
Females	36	10	0	46
Total	70	21	4	95
Males Vaccinated. . . . .	..	..	..	32
Females ,,	17	6	0	23
Males Unvaccinated . . . . .	..	..	..	17
Females ,,	19	4	0	23
Males Dead	9	3	1	13
Females ,,	10	3	0	13

The first remarkable feature in the above table is, that out of 95 patients affected with small-pox, there were only four natives of Ireland. The second is, that of 91 natives of Scotland, 70 are Highlanders, and 21 natives of the Lowlands. A very large proportion of the Highlanders were from the remote islands, and all of them, without a single exception, had recently arrived in Glasgow. 55 of the patients had apparently been vaccinated, and 40 never had this operation performed. Nearly one-half of the Highlanders had marks on their arms, but these were not in general the result of what I would consider perfect vaccination. No death occurred in any individual who presented the appearance of having been properly vaccinated. The Irishman who died was a vagrant, who had not been vaccinated, and who was exposed to the contagion of small-pox in a lodging-house at Finnieston. The occurrence of so many as 95 cases of small-pox would at first sight induce a belief that the efficacy of vaccination is not so great as was anticipated by Dr. Jenner. Further investigation, however, alters this view of the subject; for if any additional argument in favour of vaccination were wanting, it is amply supplied by the above table. The natives of Ireland furnish, as has been already shewn, 27 per cent. of the admissions to the Fever Hospital; while of 95 individuals with small-pox, 4 only were Irish. There must exist some cause for this immunity from small-pox in the Irish; and it is to be found in the general practice of vaccination among the lower classes, by the surgeons of the county, and other dispensaries of Ireland. To the neglect of vaccination, and to the practice of it with impure lymph, deteriorated perhaps in the transmission, must be ascribed the prevalence of small-pox among the Highlanders.

Having proved, from the records of the Infirmary and the Mortality Bills of the city, that small-pox is decidedly increasing, and that its mortality has been alarmingly great for the last five years at least, and most probably for a longer period, it becomes a subject of inquiry, to what cause is the increased frequency and mortality of small-pox to be ascribed? I have no hesitation in affirming, that it is owing to the neglect of vaccination, and not to the occurrence of small-pox after vaccination.

From the early period of life at which the deaths from small-pox took place, as seen in the table in the preceding page, by which it appears that of 2,196 deaths 1,933 were under five years of age, I am warranted in the inference that vaccination had never been performed; and from the small number of deaths after the age of ten, I consider it as demonstrated, that death from small-pox after vaccination is very rare; for it

must be kept in view that the majority of the patients above 10, who died from small-pox in 1836, were inmates of the hospital, none of whom had been vaccinated.

The increasing prevalence of small-pox should attract the attention of the public. It is a disease which has caused a mortality during the last few years inferior only to that of typhus and measles, and it is one which could be eradicated, under proper management, at a trifling expense, less indeed than the sum paid from the poors' rate for the coffins of its victims. The rate of mortality from small-pox is assumed upon good authority to be 1 in 5 of those attacked.

2. Scarlet Fever.

Table of the Deaths from Scarlet Fever, with the Ages, from 1835 to 1839.

Years	Under 1 Year.	1-2	2-5	5-10	10-20	20-30	30-40	40-50	50 and upwards.	Total.
1835	27	50	89	73	23	7	2	2	..	273
1836	34	57	136	86	25	9	5	1	2	355
1837	4	9	34	22	5	3	1	..	1	79
1838	3	15	42	17	7	1	1	1	..	87
1839	29	45	104	74	10	..	..	..	..	262
Total	97	176	405	272	70	20	9	4	3	1,056

The mortality from scarlet fever is liable to very great variations in different epidemics, depending on the virulence of the epidemic, the season of the year, and the worldly condition of the family in which it makes its attacks. Among the better classes in Glasgow, it is by no means a very fatal disease, except in particular families, where, from peculiar circumstances of constitution, it occasionally carries off more than one member of a family, and hence arises an exaggerated notion of its fatality.

I agree with Dr. Southwood Smith in considering the rate of 1 in 11 of those attacked as very high; and, in forming an estimate of the numbers attacked, from the number of deaths, I am inclined to assume the rate of mortality for the five years as 1 in 12. This would give the number attacked during the last five years as 12,672, which I am convinced is rather under, than above, the exact truth.

3. Measles.

Table of the Deaths from Measles, with the Ages, from 1835 to 1839.

Years.	Under 1	1-2	2-5	5-10	10-20	20-30	30-40	40-50	Total.
1835	116	141	121	34	10	4	..	..	426
1836	86	209	183	38	1	1	..	..	518
1837	77	133	122	16	2	1	..	..	350
1838	76	124	161	39	3	1	1	..	405
1839	165	259	276	73	7	2	..	1	783
Total.	520	866	863	200	23	9	1	1	2,482

Measles among the classes in easy circumstances is by no means a fatal disease, and, like scarlet fever and other epidemics, confines its ravages to the children of the poor. When the universality of the disease is taken into account, I am inclined to believe that the mortality from it is rated much too high at 1 in 12 of those attacked.

The deaths are as before stated; and it is open to every medical practitioner to draw from the data which they afford those conclusions which he may feel warranted by his own experience.

VIII.

Deaths from all these Diseases, and estimated Number attacked during the last Five Years.—From the tables which have been presented of fever, scarlet fever, measles, and small-pox, all of which are diseases propagated by contagion, and all of which, during the last five years, have been epidemic in Glasgow, the following Table has been constructed; which exhibits at one view the mortality from each disease, the number of victims under and above five years of age, and the probable number who have been affected with these diseases.

DISEASES.	Deaths.			Estimated Number attacked.		
	Under 10 Years.	Above 10 Years.	Total.	Under 10 Years.	Above 10 Years.	Total.
Fever. . . .	752	4,036	4,788	..	..	55,949
Scarlet Fever	1,020	36	1,056	12,240	432	12,672
Small Pox . .	2,044	152	2,196	10,220	760	10,980
Measles . . .	2,448	34	2,482	29,376	408	29,784
Total . . .	6,264	4,258	10,522	..	..	109,335

The deaths from these four contagious and eruptive diseases (for I feel inclined to class the present epidemic fever as an eruptive disease, since 74 per cent. of those treated in hospital exhibit an exanthematous eruption) amounted, during five years, to 10,522, being 26·06 per cent. of the whole number of deaths. Three of them have pressed heavily upon the young, while fever, as usual, has selected its victims from the productive portion of the community.

Of the number of deaths there can be no doubt. Of the number affected, as estimated from the deaths, there may be a difference of opinion. If the numbers are thought too high, the increased rate of mortality from eruptive fevers, including typhus, which such an opinion implies, only points out the greater malignity of these diseases in Glasgow, compared with the general average of other places; and in this way illustrates the state of the population.

IX.

General Remarks.—The prevalence of epidemic diseases depends upon various causes; but it is demonstrable that their rapid and general diffusion must be aided by many concurrent circumstances, among which certain states of the atmosphere and contagion must be ranked; but the most influential of all is poverty and destitution. In every one of the

epidemic fevers which have ravaged Glasgow, its progress has been slow, unless extreme destitution has existed; and it is only when contagious fever, that unerring index of destitution, has prevailed, and influenced the selfish fears as well as the benevolent sympathies of the inhabitants, that any active, although temporary, measures have been taken to alleviate the existing distress. The fever abates from want of *materiel*, and the wants of the poor remain unnoticed till its next recurrence. All the means employed at a vast expense are merely temporary; and are discontinued as soon as there is a cessation of the disease. In 1817 to 1819, when fever first prevailed to an alarming extent, its ravages were preceded by two bad harvests and want of employment for the labouring poor, and to prove the extent of the distress, not among the pauper class but among the industrious poor, it appeared in 1820 that 2,043 heads of families pawned 7,380 articles, on which they raised 740*l*. Of these heads of families 1,946 were Scotch, and 97 English or Irish. But the fact most deserving attention is, that 1,375 had never applied for, or received, charity, of any description, though they knew that funds had been voluntarily raised to a large amount; 474 received aid from the relief committee, and 194 were paupers. The individuals amounted to fully 8,000; and what were the articles pawned? blankets, sheets, and clothing of every description,—all the little articles of household furniture having been previously sold without the hope of ever being able to redeem them.*

In 1826 to 1828, 1831-32, 1837-38, when large sums were voluntarily raised, and in 1832, under the cholera assessment acts for the relief of the unemployed and sick poor, it was the previous existence of fever and the dread of cholera that instigated the benevolent deed. For the victims of the epidemic diseases of children no provision is ever made, though the coming pestilence of the adult population is clearly pointed out by the previous mortality of the young. Upon all the above occasions the funds liberally raised were judiciously expended; and the community owe a debt of gratitude to many for the time and labour bestowed by them as members of the Relief Committee. The funds have been expended in procuring employment, in feeding the poor at soup kitchens, in the purchase of fuel, in redeeming articles of clothing from pawn, and facilitating the admission of fever patients into hospitals. The Tables given of the number of fever patients in each year will prove that the years in which they are most numerous are those in which destitution most prevailed; and thus demonstrate that destitution and fever are inseparably linked together. The proceedings of the various Fever and Relief Committees in feeding the poor prove that in their estimation food, fuel, and clothing are the best preventives of fever. While it is granted that destitution is the cause and effect of the prevalence of fever, few are aware of the extent of the destitution. In May, June, and July, 1837, employment was procured for 3,072 males; 18,500 individuals were supplied with food daily from the soup kitchens, and, in the winter of 1837-38, 2,570 carts of coals (each weighing 12 cwt.) were distributed among 9,000 families, and clothing to a great extent redeemed from pawn. In short, if those who officially come into contact with the mass of crime and disease in our police courts and hospitals,

* Cleland, p. 139.—*Folio*, 1831.

be asked to what it is mainly to be ascribed? the uniform answer will be, "to destitution." That this opinion is founded upon truth will appear evident from the fact, that during the current year (as at former periods) the patients sent into hospital, not merely for fever but for other diseases, by magistrates, elders, and kirk-sessions, beyond their right of recommending, will amount to fully 2,000 per annum.

The next cause of the diffusion of epidemic diseases is the state of the districts which the poor inhabit. But they have no choice of a locality; their state of destitution ties them firmly to one, and the increasing amount of destitution is annually adding to the density of the population in the already most densely peopled districts. A reference to the map illustrates this point. In all the districts of the burgh, and in the suburbs, there is a want of sewerage and drainage, and the deficiency is in the ratio of the necessity for it. The streets, or rather lanes and alleys, in which the poor live, are filthy beyond measure; excrementitious matter and filth of every description is allowed to lay upon the lanes, or, if collected, it remains accumulating for months, until the landlord, whose property it is, is pleased to remove it. The houses are ruinous, ill constructed, and to an incredible extent destitute of furniture. In many there is not an article of bedding, and the body clothes of the inmates are of the most revolting description. In fact, in Glasgow, there are hundreds who never enjoy the luxury of the meanest kind of a bed, and who, if they attempted to put off their clothes, would find it difficult to resume them. The lodging-houses are the media through which the newly arrived immigrants find their way to the Fever Hospital; and it is remarkable how many of the inmates of that hospital coming from lodging-houses have not been six months in the city. Other causes connected with destitution might be enumerated, but this would here be unnecessary.

For years I have pointed out the effects of the indiscriminate admission of pauper patients into the Infirmary, in relieving the poor's-rates of the expense of their treatment, and laying it upon the voluntary contributors to the Infirmary, and also in rendering unavoidable the expenditure of those large sums of legacies, the interest of which only, it is presumed, was intended to be annually expended, while the capital was to remain untouched. Matters have now reached to such a point, that the managers of the Infirmary have notified that, after the 1st October next, the doors of the Infirmary must be closed to all but those who present a recommendation from some qualified subscriber.* This will bring the matter to an issue, and it is to be hoped that the guardians of the poor's-rates will see the necessity of providing sufficient accommodation for all such as may be likely to require admission into hospital in the next epidemic, and that they will bear in mind, that the population has increased 70,000 since the Fever Hospital was erected, and likewise that the hospital has been already found too small for the demands upon it. If any arguments but those of common humanity were wanting to induce the inhabitants of this city to pay more attention to the condition of the poor,

* A temporary arrangement has since been made with the managers of the Infirmary, by the magistrates, and by the heritors of the Barony parish, according to which fever patients recommended by them are to be paid for out of the poor's-rates, at the rate of 15s. each.

both when in health and in disease, they might be drawn from the great pecuniary expenditure which has been incurred for the treatment of fever patients, but hitherto with only temporary advantage.

The treatment of fever patients in hospital during the last twenty-three years, including the expense of erections, has cost the community 59,547*l.*, or 2,589*l.* per annum; the prevalence of cholera, and the co-existing destitution in 1832, cost nearly 18,000*l.*; and during 1837, 8,000*l.* were expended either upon the victims of fever, or upon those who, but for the timely aid, would certainly have been added to the number.

The following Table, for the precise accuracy of which however I cannot vouch, shews very nearly the amount raised by voluntary contribution during the last twenty-five years, and expended both in relieving the industrious poor, and in the treatment of fever or cholera patients, exclusive of the sums annually expended for the treatment of other diseases in hospitals:—

YEARS.	Sums Raised.	Sums. Expended.	REMARKS.
1816-17	£. large	£. 9,653	Among 23,130 persons.
1818	6,626	..	
1820	..	..	} Large distributions of clothing, coals, and meal.
1826	..	9,000	
1829	..	2,950	Expended in 8 months in procuring work.
1832	18,000*	18,000†	{ Partly (3,531 <i>l.</i>) in feeding the population, (355 <i>l.</i>) clothing, (870 <i>l.</i>) washing, &c.; (654 <i>l.</i>) coffins, &c.
1837	5,000	8,000	
Total .	..	47,603	Food, fuel, and redeeming clothes from pawn.
1817 to 1840	..	59,547	Expended by Infirmary on fever patients.

Upon inspecting the map of the city and suburbs, the coloured portions of which represent the burgh, a stranger will be struck with the small proportion in extent which the city bears to the suburbs. His astonishment will be increased when he is told, that over the city and suburbs there are four independent magistracies and boards of police, four assessments for the poor's-rates, and four modes of administering the poor's funds, equally independent of one another. That the amount levied in the city, in 1839, amounted to 11,790*l.*; in the Barony, about 5,500*l.*; in Gorbals, 800*l.*; and in Govan, 1,900*l.*, part only of which is expended in the town portion of the parish. It is quite obvious that the niggardly administration of the poor's funds in any of the districts, will force the paupers into others where the allowance is more liberal, and this is one cause of the increasing density of the city population.

To remedy the evil one municipal government, one police board, one mode of assessment, and one uniform mode of distributing the poor's

* About 10,000*l.* voluntary; the balance consisted of cholera assessments.

† Not all expended in 1832, but the balance, amounting to £1,854*l.* lent to Infirmary and spent.

funds, are imperiously demanded to check crime and diminish disease and pauperism. Centralization would increase the efficiency of all the above boards.

But besides the criminal police of the district, a sanatory police is also requisite, and for this purpose much more extensive powers should be vested in the police than they at present possess. Power should be given to remove filth of every description daily. Lodging-houses should be under their surveillance, and proper conveniences constructed of durable materials, and under the charge of the police, should be erected in the localities occupied by the working classes—the charge of the sewerage and drainage should belong to this department, and legislative powers be obtained to open streets through the dense unventilated districts of the town.

To improve the condition of the industrious working classes, and to prevent their amalgamation with the class below them, the law of arrestment of wages should be instantly repealed. The half-pay of the officer of the army and navy, the pensions of their widows, and the annuities to widows on the funds of the Church of Scotland, of the advocates, writers to the signet, and of the faculty of physicians and surgeons, are declared alimentary and non-arrestable; and yet the daily wages of the operative are weekly arrested in the hands of his employer. The harassing vexation, and the almost incredible amount of expense, attendant upon the legal proceedings—the loss of valuable time, and, frequently, of situation, debase the workman, and often drive him to intemperance and destitution. The arrestment of workmen's wages is an evil of the deepest magnitude; for years I have watched its operation on the state of the working classes, and know not a greater boon that could be conferred upon them than the repeal of the law, and an enactment declaring wages alimentary.

The poor-law of Scotland ought instantly to be revised. Without referring to the rural districts, it is quite obvious that in our towns some change must be made. True economy and self-interest demand it; the increasing destitution pointed out by the increasing mortality shews the necessity for it, and the practical precepts of Christianity urgently enjoin it. The provision for the destitute must include the healthy as well as the sick; the system must be in continual operation; disease must be prevented, not treated.

The children of the poor should be, like their parents, under the charge of the district surgeons. Vaccination should be performed on every infant. Fever patients should be speedily removed to hospital, and not left at home for eight or ten days diffusing contagion. Relief must be extended after recovery until work is found, and one uniform system of co-operation be established among the guardians of the poor's funds, the managers of our hospitals, lunatic asylums, houses of refuge, and other charitable establishments.

On the Mont de Piété System of Pawnbroking in Ireland. By HENRY JOHN PORTER, Esq., of Tandragee, County of Armagh.

[*Read before the Statistical Section of the British Association, 22nd September, 1840.*]

HAVING visited several of the charitable institutions in Paris in the year 1837, I was greatly interested by that admirable institution, the Mont de Piété; and, with a view to bring the system into operation in the north of Ireland, and thereby diminish the evils of the pawnbroking system, as at present carried on, I devoted some time, while in Paris, to making myself acquainted with its management in all its details. I there learned, for the first time, that Mr. Barrington, of Limerick, had established a Mont de Piété in that city, and I have since had an opportunity of visiting that institution, and can state, with confidence, that it is succeeding beyond the most sanguine expectations of its benevolent founder.

In order to ascertain, as nearly as possible, the amount of business which is done throughout Ireland, I considered that one whole county, that of Armagh, in which I reside; one large trading town, such as Belfast; and the metropolis of Ireland, would furnish data on which to calculate, if necessary, the pawnbroking business of the whole kingdom. I therefore deposited in every pawnbroker's shop in those places an article of clothing, and received duplicates, or tickets, each bearing a number on it, which shews the order in which articles are received and registered. In seven days after I deposited another article of dress in each pawnbroker's, as before, and received, in like manner, duplicates, or tickets; and, in a few cases, where there was some doubt as to the numbers written on the tickets, which are not always very legible, I deposited a third article. Now it is manifest that a ticket received on the first occasion, bearing upon it the number 31,843, and a ticket in seven days after, issued from the same house, bearing the number 34,564, gives one week's transactions as 2,721 articles pawned, which, at a 1*d.* each for the tickets, which is the usual charge by all pawnbrokers in Ireland, amounts to 11*l.* 6*s.* 9*d.*, or 58*9l.* 11*s.* in one year. This will be allowed to be a large profit, when added to the interest charged on loans to the poor of one of the most distressed and wretched districts in the city of Dublin; one which I particularly well know, as I became acquainted with the evils of pawnbroking there, in the course of my duties as one of the district visitors of the Charitable Association. By these means I had at one time in my possession duplicates, or tickets, to the following amount:—

42	Pawnbrokers in Dublin, 2 tickets each	84
35	„, Belfast, 2 do.	70
12	„, county of Armagh, 2 do.	24
5	„, part of Newry, not in the county of Armagh, 2 each	10
	A third article in 15 of the above	15
Total articles of clothing		203

I was, however, determined that any statements which I might be led to make should not rest on this kind of evidence alone, and therefore I visited the poor in the lanes and alleys, the cellars and the garrets of many of these towns, and availed myself of the information derived from

great numbers of duplicates, or tickets, in their possession, which had been issued at every season of the year; and I found that the business done between the 15th December and 15th January is generally two-fold more than at any other equal period; and, in summer, when provisions are scarce, and prices high, the number of pawns are proportionally increased, as well as the number of releases proportionally decreased.

The amount of money lent is calculated, on an average, at 3s. on each article, except in Dublin, where it is found to be about 4s.

In the course of releasing several articles for the poor whom I thus visited, I became acquainted with the charges and impositions practised upon the poor, but it is unnecessary to occupy the Section with these particulars. I found no difficulty in procuring information from the poor whom I thus visited; they were rejoiced by receiving many articles which I released; but so quickly was my visit to a neighbouring town made known by some of the persons I had relieved, that the next morning the housekeeper was besieged by numbers, who wanted to see "*the gentleman whom they had heard the Queen had sent over to Ireland to release all their goods out of pawn.*" I was obliged to shorten my visit to the friends with whom I was then staying, and to postpone my investigations in that town until this foolish report had subsided.

The following is a Table shewing the results of these experiments:—

Pawnbroking on the Old System.

TOWNS.	Popu- lation.	Number of Pawn brokers.	Number of Pawns in Twelve Months.	Amount lent in Twelve Months, at 3s. each Pawn.	Amount charged in pence for Duplicates.	Profit, after Print- ing Duplicates, and deducting 6 per cent. for Capital and 6 per cent. for Stock.
				£.	£. s. d.	£. s. d.
Armagh	10,518	4	97,990	14,697	408 5 0	1,170 3 10
Lurgan	2,842	3	43,440	6,516	181 0 0	516 3 7½
Newry, part of . .	See below.	2	49,680	6,102	119 10 0	433 7 14
Tandragee	1,559	1	15,540	2,331	64 15 0	184 13 8½
Portadown	1,591	1	14,940	2,241	62 5 0	177 10 9½
Market-hill	1,043	1	9,660	1,449	40 5 0	114 15 6½
Total in the County of Armagh . . . }	..	12	222,240	33,336	926 0 0	2,646 14 2
Newry, whole of. .	13,131	7	120,000	18,000	500 0 0	1,425 15 6
Belfast	67,388	35	737,280	110,592	3,072 0 0	8,760 19 14
Dublin	265,316	42	3,820,200	764,040	15,917 10 0	56,107 11 3

If, then, it is found that the poor of the county of Armagh are paying for duplicates (which are supplied gratis at a Mont de Piété) nearly 1000*l.* annually, the poor of Newry 500*l.*, the poor of Belfast above 3000*l.*, and those of Dublin nearly 16,000*l.*, surely it is most desirable to substitute the Mont de Piété for the common pawnbroker, wherever it is practicable; thus relieving the poor from those exorbitant charges, and restoring to the same class from which the profits are derived the overplus, in the shape of some local charity, such as fever hospitals, or grants for the reduction of provisions in time of scarcity or want of employment.

It was a curious fact, which I ascertained, that the pence charged for duplicates in one year by the pawnbrokers in the county of Armagh exceeded the whole of the county grants to dispensaries, during the same period, by the sum of 132*l.* 17s. 6*d.*, the former amounting to 926*l.*, and the county grants to dispensaries being only 793*l.* 2s. 6*d.*; and the

estimated profits of the pawnbrokers within the county of Armagh, after paying for the printed tickets, and deducting 6 per cent. for interest on their capital, exceed the whole of the Grand Jury Presentments for charitable purposes by the sum of 260*l.* 10*s.* 4*d.*

The profits being	£2,646	14	2
Grand Jury Presentments, viz.—			
To 15 Dispensaries	£793	2	6
County Infirmary	593	3	1
District Lunatic Asylum . .	999	18	3
			<hr/>
		2,386	3 10
			<hr/>
		£260	10 4

In making these calculations, I have been indebted to the valuable assistance of Mr. Haynes, whose experience renders him so eminently qualified for the important post he occupies as manager of the Limerick Mont de Piété. Having been himself a pawnbroker for fourteen years, he was able to throw great light on this subject in his examination before a Select Committee of the House of Commons, the report of which is worthy of attention, and from which I shall here give two short extracts.

Mr. Haynes states in his evidence relative to the Mont de Piété at Limerick :—

“ I have no better means than the pawnbrokers, I mean the honest pawnbrokers, to employ to detect thefts; but since we commenced business, I have transported three felons, and handed several others over to the authorities. I have taken six weeks of the business of our establishment, and there were released, of 1*s.* pawns, that were pledged in the same week in which they were released, a total of 1,095, giving an average of 182 pawns released each week. If they were released in any other office, the annual interest on them would be 59*l.* 3*s.*; in our office it is only 19*l.* 17*s.* 2*d.*; therefore we save that description of borrower 49*l.* 5*s.* 10*d.* a-year, upon those shilling loans only. On 12th May, 1838, we released 174*l.* 19*s.* 7*d.* money lent, and our interest was 7*l.* 15*s.* 2*d.*; the pawnbroker's interest on that sum (including penny tickets) would have been 17*l.* 1*s.* 11*d.*, so that the saving effected in one day to the poor was 9*l.* 6*s.* 9*d.*”

Mr. Douglas, the Secretary and Inspector of the Mont de Piété, at Limerick, gives the following evidence :—

“ A considerable amount of moral good certainly has been effected in checking crime of various kinds, as all property that is not only ascertained but suspected to be stolen, is instantly stopped, until it can be ascertained whether it has been honestly come by or not; and the conductor, Mr. Haynes, has already stated to the Committee, that he has transported three persons for bringing stolen property that was traced, and imprisoned at least three times that number.”

Having succeeded in proving to the gentry, to the clergy of all persuasions, and to the merchants of the town of Tandragee, in which I reside, that the Mont de Piété system of pawnbroking would present a mitigation of evil—for I cannot undertake to advocate any system of pawning as an abstract good—they most kindly co-operated with me in the establishment of an institution, embracing a charitable pawn-office, a loan fund and a bank for savings, all under one administration, managed by the same board of directors, with whom I have the pleasure of acting as one of the honorary secretaries.

I shall now give an abstract of the result of the operations of the Tandrage Mont de Piété:—

Pawnbroking Department.

	Number of Pawns Deposited.	Number of Pawns Released.	Amount lent on Pawns.			Amount Received on Pawns Released.			Interest Received on Pawns Released.		
			£.	s.	d.	£.	s.	d.	£.	s.	d.
1839											
9 months, Jan. to Sept.	12,312	8,521	1,500	6	0	1,023	9	8	76	0	2½
3 months, Oct. to Dec.	2,900	3,020	422	8	4	395	4	0	34	15	3½
Total for 12 months.	15,212	11,541	1,922	14	4	1,418	13	8	110	15	6
1840											
9 months, less 2 weeks to the present period }	6,523	6,698	864	9	11	981	5	5	104	11	0
Decrease on 9 months of 1840, less 2 weeks, compared with 9 months of 1839 }	5,789	1,823	635	16	1	42	4	3	*28	10	9½

* Increase of Interest, the Releases being greater than the Pawns.

In nine months of 1839, 11 out of 16 articles were released, and 3,791 articles remained in store, over and above the number of articles released; and in 1840, up to the present period, there were released 175 articles more than the whole number pawned: thus shewing that where the pawnbroking of any town can be all confined to a Mont de Piété, the amount of pawning may, by judicious management, be greatly diminished.

It is necessary to observe, that there was an interval between the removal of one conductor, or pawnbroker, and the appointment of his successor. But taking even this into account, it is certain that both the pawning and borrowing on personal security has been very considerably diminished.

Loan Fund Department.

	Number of Loans.	Amount Lent.	Weekly Instalments.			Interest and Fines Received.		
		£.	£.	s.	d.	£.	s.	d.
1839								
9 months, January to September	3,745	15,286	15,107	11	11	608	2	5
3 months, October to December	1,011	4,141	4,247	11	2	178	11	2
Total for 12 months . .	4,756	19,427	19,355	3	1	786	13	7
1840								
9 months, less 2 weeks to the present period }	1,980	8,150	8,303	6	7	291	8	4
Decrease on 9 months, less 2 weeks of 1840, compared with 9 months of 1839 }	1,765	7,136	6,804	5	4	316	14	1

Savings' Fund Department.

	Lodged.	Withdrawn.
Savings in 9 months of 1838	£688	£408
“ 9 “ 1839	994	594
“ 12 “ 1839	1,303	913

The only pawnbroker in the town of Tandragee gave up business within three months after the Mont de Piété was opened.

I next turn my attention to the town of Portadown, which is also on the Tandragee estate, and within four miles distant from Tandragee. I shall read the results of the operations of the Mont de Piété there.

Portadown Mont de Piété.—Pawnbroking Department.

For twelve months ending 31st December, 1839 :—

Number of pawns .	10,420
Number of releases .	7,223
Amount lent on pawns . . .	£1,220 14 4
Amount received on releases . .	772 8 4
Interest received on pawns released	36 0 8

Comparison of first four months of 1839 with same period of 1840 :—

	No. of Pawns.	Amount lent on Pawns.
1839, 1st Jan. to 30th April,	2,850	£316 15 7
1840 „ „ „ „	3,700	465 13 8

The above comparison only extends over a period of four months, because the pawnbroking department at Portadown, as far as pawning is concerned, ceased for some months in consequence of the dismissal of the conductor or pawnbroker, who was discovered to have acted fraudulently. The releasing department necessarily continued, as it would have been a serious inconvenience to the poor if they could not have redeemed their clothing and other articles, whenever it became convenient for them to do so.

From the foregoing comparison, it will be perceived that pawning increased in 1840 ; but this is a farther proof of the value of the institution, as the pawnbroker at Portadown still continued, and continues, to carry on his business ; so that it may be hoped that, while the Mont de Piété increased its operations, those of the usual pawnbrokers were on the decline. And although I am bound to admit that the individual who keeps this pawnbroking establishment is one of the most respectable in the trade, yet I do not despair of seeing him relinquish his business, and leave the field to the undisputed management of the charitable pawn-office, under the superintendence of the directors of the Mont de Piété ; in the event of which I have no doubt that the extent of pawning, on the whole, will be considerably diminished. The business of releasing, up to the present period, stands as follows :—

	Number of Releases.	Amount Received on Pawns Released.
1839, 9 months—Jan. to Sept. . .	4,962	£196 17 8
1840, 9 months—Jan. to Sept. less 2 weeks to the present period . . }	4,800	588 9 11

Had the pawning continued without interruption, no doubt the amount of releasing would have still further increased.

Loan Fund Department.

	Number of Loans.	Amount Lent.	Weekly Instalments Received.	Interest and Fines Received.
1839, 12 months . . .	3,930	£15,973	£14,736 8 10	£698 13 3

Comparison of nine months, 1839 with 1840 :—

1839, Jan. to Sept. . . .	3,003	12,015	10,999 5 8	514 9 1
1840, Jan. to Sept., less 2 weeks to the present time }	2,621	10,420	10,688 1 0	429 15 2

No very material decrease is evident from the above, as the two weeks not yet taken into account are not expired.

I am unable to state what are the receipts of the savings' fund department at Portadown, but they are not considerable, although I believe that the lodgments are gradually increasing.

I was enabled, within the last year, to have a Mont de Piété established at Belfast, under the most promising circumstances; and, at a future time, I hope to be able to give an account of its operations, together with those of several similar institutions, concerning which I have been in correspondence with various friends throughout the north of Ireland. A meeting was convened by the clergy of all denominations at Belfast, and although it was attended by the majority of the pawnbrokers of the town, not one of them ventured even to question the statements I there publicly made concerning the sufferings of the distressed working classes, from the unjustifiable practices of many pawnbrokers in various parts of Ireland. I shall here give but two of the many instances which came under my own observation.

I redeemed for a poor person an article on which 1s. 6d. had been lent; it was in pawn six months; the expense charged to the poor person, and which I paid, was 1d. for the ticket, and 3d. for interest. Now this was in direct violation of the Act of Parliament, which allows $\frac{1}{2}$ d. per month on 1s. 6d. This loan was under the sum which entitled the pawnbroker to $\frac{1}{2}$ d. per month, notwithstanding that the ticket bore upon it the loan and penny for the ticket—total, 1s. 7d.; which is very generally added to the loan, as it enables the pawnbroker to charge more interest when it makes the amount to exceed the regulation of the Act of Parliament. This fact, therefore, proves that double the amount of legal interest was charged to the poor person referred to. The Mont de Piété would not have charged more than $\frac{1}{4}$ d. per month on that or any sum under 2s. The other release was a small sum, but bearing such charges that 100*l.* borrowed at the same interest for one year, would have been at the rate of *twelve hundred per cent. per annum.*

I am persuaded that at the present moment the working classes throughout Ireland are suffering most severely from the unjustifiable charges made by many of the pawnbrokers. I admit there are many respectable persons in the trade; but I can prove that there are many others who may well be described in the words of Isaiah—"The spoil of the poor is in your houses. What mean ye that ye beat my people to pieces, and grind the faces of the poor?" I shall not be considered to use too harsh language, in describing this oppression of the poor, when I mention that I had at one time in my possession fifty-four pawnbrokers' tickets, the property of one respectable, but most distressed, family, who have raised the amount of 4*l.* 7*s.* 8*d.* in small sums, for the use of which (the greater part not exceeding six months) they would be obliged to pay the enormous charge of 1*l.* 19*s.* were they now able to redeem their property; which they are not.

Contrast this accommodation with that of a Mont de Piété. The interest for the same sum, and for a like period, would only be 17*s.* 3*d.*, while the interest accruing, if the property continues unredeemed, would be only one-half, and no extra charges for duplicates or tickets. Add to this that the probable advance, on the same amount of property pledged at a Mont de Piété, would be 6*l.* 11*s.* 6*d.*, or 2*l.* 3*s.* 10*d.* more

than the loan advanced by the pawnbroker to this afflicted family in the time of their pressing need. I may also observe, that for every ticket or duplicate issued, it is the practice to charge 1*d.*, and that one pawnbroker in Ireland issued no less than 66,612 tickets in one year, receiving in pence alone, and independent of interest, the large sum of 277*l.* 11*s.*

Mr. Barrington, from whom I have gleaned much interesting information, has made some calculation of the probable profits of the pawnbrokers in Ireland, of whom there are about 700; and estimates their average profits at above 900*l.* per annum each, the aggregate profit in this trade amounting to the annual sum of 630,000*l.*

At the close of the first nine months of the operations of the Tandra-gee Mont de Piété, I was able to shew that the borrowers from the loan fund department, on personal security, had in their possession 1,189 looms, of which 612 (more than half the number) were hired at 10*s.* per annum. One man had at that period one loom, for which he had paid 12*l.* within the previous twenty-four years, without any other alteration than that which was necessary on the invention of the fly-shuttle; and, after having paid the price of four new looms in interest, he was not at that time the owner of one. Here, and in many similar cases, the Mont de Piété was the means of relieving the poor, and the owners of looms for hire began to find it difficult to let them out. One farmer proposed to sell his stock of looms to the Institution, finding the hope of his gain drawing to a close; but of course the proposal was rejected, as these old looms were incapable of producing as good a fabric as the new looms issued by the Mont de Piété.

At the period of which I speak (first nine months of operation), above 2,600 loans had been granted for the following purposes:—

For provisions.	Loans	550	Amounting to	£1,640
Materials for trade	„	138	„	402
Dealing	„	194	„	664
Clothing	„	41	„	81
Repairs of houses.	„	51	„	148
Yarn for weaving	„	187	„	612
Looms	„	131	„	448
To pay small debts	„	70	„	193
To buy cows	„	594	„	2,569
„ pigs	„	375	„	1,223
Farming purposes, seed, &c.. . . .	„	260	„	838
Rent	„	77	„	252
Total		2,668		£9,070

In order to form some idea of the benefit derived by these borrowers, I examined great numbers of them as they appeared on the payment of the last weekly instalment. I ascertained pretty nearly the amount of money saved or realized by their having the advantage of ready money, and from these I formed an average estimate of the whole.

Oatmeal. . . £1,100 . . .	Saving . . .	£308
Potatoes. . . . 550 . . .	„ . . .	338
Cows. 2,569 . . .	Profit . . .	1,284
Pigs 1,223 . . .	„ . . .	166
Dealing 664 . . .	„ . . .	166
Total . . . 6,096		Total . . 3,596

Had the Mont de Piété conferred no other benefit on the country than that derived by the peasantry, in procuring their summer provisions for ready money, that alone would amply repay the directors for all the labour bestowed on the working of the Institution. What were the circumstances of these 550 families in by-gone summers? Many of them found it difficult to procure credit, or obtain a sufficient supply of wholesome food for the maintenance of their families; idleness prevailed, sickness increased, and not unfrequently fields were mortgaged to more wealthy neighbours, who supplied the wretched holders of two or three acres of land with the required food at an exorbitant price. Others, whose credit was good, passed promissory notes, payable at harvest, and not unfrequently they were charged for meal 6s. or 8s. per cwt. more than the market price, independent of the expense of stamps; and it was no uncommon practice for a poor man, wanting the immediate use of a few pounds in money, to purchase oatmeal from a fore-staller of provisions, while a third person would buy back the oatmeal from the poor man at a much less price than he was charged, hand him the money, and the oatmeal would never be delivered, but sold again by the fore-staller to the next customer. The object of this transaction is evident. The value of a promissory note for provisions would be easily recoverable at the quarter-sessions, while one for cash, bearing usurious interest, would be likely to involve the fore-staller in an open violation of the law. Thus were the poor on every side oppressed; the harvest time arrived, and the debts for summer provisions were generally first paid from the produce of the farm; too often were they unable to pay just demands of rent and other charges, while in few cases were they able to hold over their corn till the most favourable time arrived for bringing the produce of their farm to market.

What, on the other hand, has been the experience of the last summer? Those 550 families borrowed, on moderate interest, from the Mont de Piété, 1,640*l.*, and by habits of industry and increased diligence their weekly instalments are paid; at harvest, instead of being deeply involved in debt, they owed nothing for their summer's food, and the produce of their land has in many cases been reserved for weeks, till the best price could be obtained; they are able not only to pay their rents, but to supply themselves and their children with better clothing. But other moral effects have followed. Halfpence and pence, which formerly were squandered in tobacco, snuff, and ardent spirits, are treasured up for the Monday morning's instalments, and the people are beginning to feel the value of small sums, and the truth of the old proverb, that "if you take care of the pennies, the shillings will take care of themselves."

Again, we find that 2,569*l.* has been borrowed for the purchase of cows. The benefit to the poorer classes in this particular is incalculable—the health arising from the possession of an abundant supply of milk; the improvement on their farms, by sowing green crops for the maintenance of their cows; the increased quantity of manure which is provided for the land—while it has been ascertained that in twenty weeks the generality of cows purchased have paid, by the produce of milk and butter sold, one-half of their own cost. Hundreds of families are now possessed of a cow each, and great numbers have already procured a second. As a proof of the saving habits which are promoted by this

system, I may mention, that a respectable person has settled in this town, whose sole business is the purchase of butter and eggs for exportation; and he finds it frequently difficult to attend to the immense influx of persons who come to sell their produce to meet their weekly instalments. One poor woman borrowed a pound; she bought five hens for 4s. 2d.; she expended 15s. 10d. in clothing, and at the end of the twenty weeks her five hens had been the sole means of paying off her debt to the loan fund.

But what is the testimony of the manufacturers in the neighbourhood? That the industry which is promoted by the necessity of those weekly instalments, and the punctuality of the weavers in returning their cloth, has already had the most beneficial effects.

And how are persons in trade affected by the operations of the *Mont de Piété*? I have it from the best authority, that a great increase of business has been the result, and a greater degree of punctuality in meeting all engagements on the part of the poorer classes.

One class alone are suffering from the effects of the *Mont de Piété*, and they are little deserving of compassion. Those who live by the destruction of others, both soul and body, are not to be commiserated—those who keep open houses for the drunkard—and when they have given a poor person as much whisky as they think he can pay for, or is able to consume, turn him out incapable of taking care of himself, and exposed to the risk of a watery grave in the next river or canal he meets—those are surely persons whose lack of business and prosperity is a blessing, and whose failure in trade must be held as a common good. I have undoubted authority for saying that the temperance cause and the *Mont de Piété* are going hand-in-hand; and the twopence for the morning glass, or the shilling for the night's carousal, are now carefully saved to meet the weekly instalment.

I might enlarge on the important benefits which this institution confers upon the working class—above 1,200*l.* expended in the purchase of pigs, which are such a source of wealth to the Irish poor, being nearly fattened on the refuse from the tables of the owners.

It may appear that the amount of fines and legal expenses have been high—224*l.* 16s. 10d. This in a great degree depends on the discretion of the director who signs the recommendation. After twelve months' operation, I procured the following return of the number and amount of loans granted on the estates committed to my peculiar care, and connected with the Portadown *Mont de Piété* :—

13 Loans of	£1	£13
55	,,	2 110
79	,,	3 237
62	,,	4 248
185	,,	5 925
<hr/>		
394		£1,533
<hr/>		<hr/>

Of these, the number noticed for irregular payment was two, and not one had been summoned for default of payment. I do not mean to say that none have ever been defaulters on these estates; but whenever they have, it is my firm belief that it arises from the injudicious recommendation by a director of an unworthy object.

The saving department requires little notice. The amount of interest allowed is 4 per cent., and in all respects the operations are similar to savings' banks. The security, however, is not that of Government, but of the Institution. Many of the sums withdrawn were in order to procure debentures, when the small savings amounted to 5*l.*, these debentures bearing interest at the rate of 6 per cent. per annum.

The profits by Act of Parliament are necessarily expended in local charity, and may be placed to the credit of the poor, in the name of the trustees, as a capital or stock, thereby reducing the amount of debentures issued, and consequently of the interest to be paid by the Institution. In our establishments we have placed some of our profits to each of those objects. At Tandragee 71*l.* 17*s.* 9*d.* was expended in 1839 in reducing the price of oatmeal one-third:—433 families, consisting of 2,216 individuals, received meal at one-third less for six weeks.

At Portadown 50*l.* was expended in the same manner; and in that town 208 families, consisting of 1,144 persons, received oatmeal at a reduction of one-third in price, during six weeks of the most pressing season of the year. In each of these towns 50*l.* have been applied to fever hospitals; in Tandragee for the support of one in operation, and at Portadown for the establishment of one where none had previously existed.

Before I conclude, I shall give some information relative to pawnbroking in Glasgow; but, as my inquiries have been confined to the three or four days during which I have been in the city, my information is necessarily limited.

There exists in Glasgow a system of pawning quite new to me, and, I believe, wholly unknown in Ireland. These are called "wee," or little, pawns. I regret to say that the evils of this system are neither wee nor little. The supposed advantages or inducements to pawn at these brokers are as follows:—1st, They give money on articles of less value than the licensed pawnbrokers will receive. 2nd, They give about 2*s.* 6*d.* on articles which at licensed pawnbrokers will produce but 2*s.*; this is 25 per cent. more on the deposits. 3rd, They are open earlier and later than the usual pawnbrokers. 4th, There is one of these houses opened on the Sabbath, both for pawning and releasing, which is kept by a Jew in Gibson's-wynd, or Princes-street.

The manifest disadvantages are—1st, They give no tickets, and consequently there is no security. They pretend to effect a purchase of the article, and although the poor person is under the impression that the article is still their own, yet in cases of dispute which come before the police authorities, these illegal pawnbrokers almost invariably contrive to prove that there has been a *bond fide* purchase and sale of the article. 2nd, The time for redeeming these pawns is one month instead of one year. 3rd, The interest charged is one penny per week for one shilling, or at the rate of 433½ per cent. per annum.

This is a most fearful oppression of the poor, and calls for immediate exertion to provide a Mont de Piété in the city of Glasgow, which alone, I believe, can undermine, and ultimately overturn, this illegal system.

I have been able to make some inquiry into the extent of business transacted by the licensed pawnbrokers in Glasgow, by visiting many of the garrets and other crowded places in the closes and wynds in and

around the Bridgegate. In the course of these visits I had an opportunity of seeing about fifty pawn tickets, and I noted down the date and number of each; and, although the calculation I have made from these cannot be received as a correct and full statement, yet it amounts to an approximation to what may be correct. Having made calculations from the tickets of six out of twenty-four pawnbrokers, and the amount of their transactions, ranging from 28, 30, 33, 42, 53, and 61,000 pawns annually, it may be presumed that these present a fair average; and, if so, the number of pawns annually lodged in the twenty-four licensed pawnbrokers would be 997,832, which, at 1*d.* each for the ticket, produces 4,157*l.* 12*s.* 8*d.* The average amount lent on each pawn which I have seen is nearly 2*s.* 6*d.*; but as I have only seen the duplicates of the very poorest class of pawners, I believe that 3*s.* would be a fair average. The amount lent out in Glasgow in twelve months would thus be about 149,674*l.*

I am indebted to the kindness of the Lord Provost and Captain Miller for some additional information which I procured on Tuesday morning. I was accompanied by the latter in visits which I made to many of the brokers, or wee pawns, with a view to form some idea of the amount of business carried on by this unlicensed system of pawnbroking, and I cannot refrain from expressing my astonishment and admiration of the control under which these, otherwise intolerable, nuisances are placed by the very efficient superintendence of the police department, under the command of Captain Miller. I found no difficulty in procuring information from these brokers; but I am free to confess that I should have required more courage than I can command to have ventured alone into the houses in those wynds, in which every house, almost without exception, is occupied by an unlicensed pawnbroker.

I am informed by Captain Miller that there are 400 of these unlicensed pawnshops within the police district, and about 300 without those limits. I find by the evidence of these brokers themselves, that on an average above 58,172 articles are pawned with each of them annually. This number, multiplied by 700, gives the total number of pawns in one year (not including the business of the twenty-four licensed pawnbrokers) as 40,720,400. I ascertained that the sums lent on these deposits varied from $\frac{1}{2}$ *d.* to 1*s.*, and, in a few cases, even above that sum, but that the average, on the whole, is 4*d.* Now, in order to err on the safe side, I will calculate at an average of only 3*d.* for each deposit, and I am really almost afraid to state the amount, lest I may be supposed to exaggerate; it is, nevertheless, above half a million of money, or 504,005*l.* lent to the very poorest and most distressed class of the population, within the limits of the city and its suburbs; and this sum is lent out *at an interest of 433*l.* 6*s.* 8*d.* per cent. per annum.*

But as it would require much more time and care to give a full and correct view of pawnbroking in Glasgow, these few calculations must only be received as an approximation to the truth.

MISCELLANEOUS.

An Account of the Quantities of Foreign and Colonial Wheat and Wheat-Flour Imported, Paid Duty, and Remaining in Warehouse, in each of the Months ended 5th July, August, and September, 1840.—(Continued from p. 208.)

Months ended	Wheat.			Wheat Flour.		
	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.
	Qrs.	Qrs.	Qrs.	Cwts.	Cwts.	Cwts.
5th July ..	284,623	148,439	526,252	113,095	100,813	132,508
5th Aug. ..	206,200	2,726	721,071	187,784	77,555	226,889
5th Sept. . .	293,940	362,456	642,900	123,611	237,161	100,712

Quarterly Average of the Weekly Liabilities and Assets of the Bank of England in the Quarters ended 21st July, 18th August, 15th September, and 13th October, 1840, and in the corresponding Quarters of the preceding Year.—(Continued from p. 208.)

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
1839.	£.	£.	£.	£.	£.	£.
23rd July ...	18,049,000	7,955,000	26,004,000	21,905,000	3,785,000	28,690,000
20th Aug. ...	17,969,000	8,029,000	26,998,000	25,588,000	3,265,000	28,853,000
17th Sept. ...	17,960,000	7,781,000	25,741,000	25,936,000	2,816,000	28,752,000
15th Oct. ...	17,612,000	6,734,000	24,346,000	24,939,000	2,525,000	27,464,000
1840.						
21st July ...	16,951,000	7,578,000	24,529,000	22,865,000	4,529,000	27,394,000
18th Aug. ...	17,128,000	7,701,000	24,829,000	23,152,000	4,560,000	27,712,000
15th Sept. ...	17,263,000	7,675,000	24,938,000	23,407,000	4,453,000	27,860,000
13th Oct. ...	17,231,000	6,762,000	23,993,000	22,782,000	4,145,000	26,927,000

Aggregate Amount of Notes circulated in England and Wales by Private Banks, and by Joint-Stock Banks and their Branches, respectively, in each of the Quarters ended 28th March, and 27th June, 1839-40.—(Continued from p. 208.)

Quarters ended	1839			1840		
	Private Banks.	Joint Stock Banks.	Total.	Private Banks.	Joint Stock Banks.	Total.
	£.	£.	£.	£.	£.	£.
28th March .	7,642,104	4,617,363	12,259,467	6,893,012	3,940,232	10,833,244
27th June .	7,610,708	4,665,110	12,275,818	6,973,613	4,138,618	11,112,231

The usual Tables omitted in the present Number will be inserted in the next, together with a complete list of the Statistical Papers published by the Houses of Parliament during the past Session.

QUARTERLY JOURNAL

OF THE

STATISTICAL SOCIETY OF LONDON.

JANUARY, 1841.

An Enquiry into the Mortality occurring among the Poor of the City of Limerick. By DANIEL GRIFFIN, M.D.

[*Read before the Statistical Society of London, November 16, 1840.*]

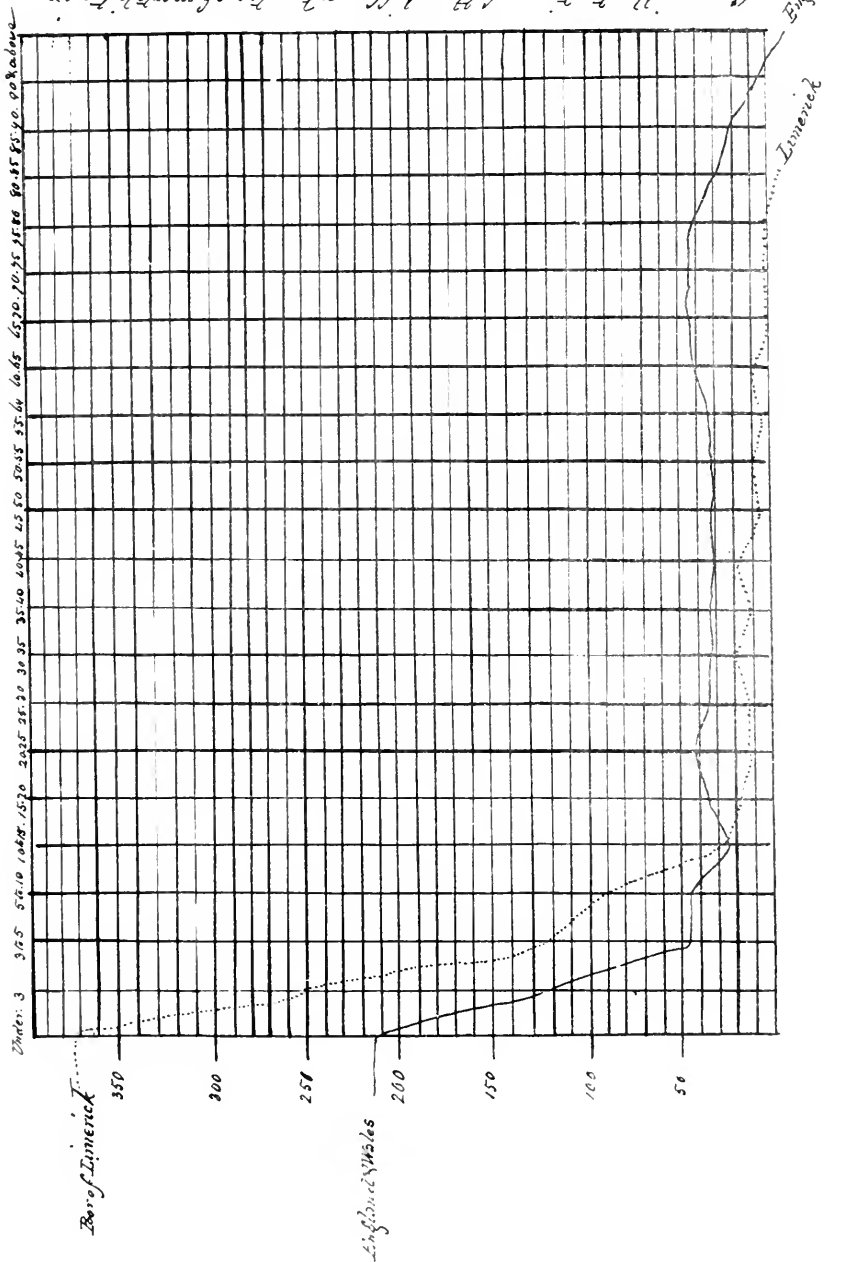
THE following enquiry was at first undertaken merely for the purpose of ascertaining what the losses by death were among the children of the poor, more especially at the earlier ages, beyond which I had not then any idea of extending it. From a considerable experience in dispensary practice, and the extreme wretchedness of the class in this city, which that species of charity is intended to relieve, I had long suspected that the mortality among the children of the poor must be much greater than is usually observed, even in situations in which it is very considerable. After a little time, finding the results interesting, I set about the investigation more formally, and procured a book, which, when properly ruled, contained columns for the names of parents, and of their living children, with their respective ages, and the diseases, if any, under which they then laboured. It contained, also, columns for the names of such parents and children as had died, together with their ages at the time of death, and the diseases of which they had died. Each parent who applied for medical relief at the dispensary was then questioned on all these particulars. The enquiry was confined entirely to persons of that class, and with very few exceptions was conducted by myself.

After I had obtained all the deaths which had occurred in one or two hundred families, and found them nearly equal to the number left alive, I perceived that facts taken down in this manner afforded no means of determining the rate of mortality *annually*, and thus of enabling me to compare the loss of life with that which occurs in other places; and, in fact, that this method could only give the proportions dying at different ages. It struck me, however, that as all the deaths occurred since the period of marriage, some rough approach to an annual mortality might be had by noting the duration of the married term in each family at the time of the enquiry, and then finding from this a mean term for the whole. This particular was therefore included in subsequent entries. The families were taken quite indiscriminately, and as the object was to ascertain the mortality of that class *in the city*, the only thing insisted on was, that they should have lived the whole, or much the greater portion, of the married period in town.

The city of Limerick is finely situated on the Shannon, at about 60 miles from the sea, the highest point to which the river is navigable without interruption. The soil is extremely rich, and independently of circumstances which might be remedied, there is nothing insalubrious in its position. The population in 1821 was stated at 59,045, and in 1831 at 67,575; of which number 44,100 were said to be in the city and suburbs, and the remainder in the rural districts, called the "Liberties." These last numbers are considered by many to be much under the truth, especially as in 1821 the number of souls to one house was rated at 11, and the tract called the Liberties is very extensive, embracing a circuit that in some places is 4 miles distant. The city is composed of 3 portions—the English town—the Irish town, and the New town, called New-town Pery. The first and oldest occupies the southern end of the King's island, a tract formed by the Shannon, here divided into two streams, of which the narrowest and most rapid is called the Abbey river; and both it and the Irish town were included within the walls when the city was fortified. From this circumstance, and its great antiquity, it contains a multitude of narrow filthy lanes, and of houses falling to decay; inhabited, many of them, from garret to cellar, by a most miserable population, consisting, among others, of ejected tenantry from the surrounding counties, who always on their expulsion make a run to the cities in search of food and shelter for their starving families. Of this last class, Limerick, from its situation in the centre of several counties, in which the system of depopulation has to a considerable extent prevailed, has received much more than its due proportion. It was no inconsiderable delay to me in the prosecution of this enquiry, that I was obliged to reject a number of families on the ground of their having only recently come into town; and I have caused the registrar of the Dispensary latterly to make a note in the register of the time during which each family applying for relief has resided in town, with the number of persons of whom it consists, in order to enable the Commissioners and the Poor Law Guardians to judge how many of these pauper ejected tenantry the city will be called on to support under the workhouse system. The larger portion of the English town consists of the parish of St. Mary, a place long celebrated for the afflicting instances of destitution it so frequently exhibits. Those who have read the simple and touching descriptions of individual suffering, given some years since, by the late Rev. Thomas Enraght, Roman Catholic curate of this parish, will not readily forget the circumstances to which I allude, or the force of those appeals, which brought him contributions for their relief, not only from various parts of England, but even from India. The Irish town, consisting principally of the parish of St. John, is very similarly circumstanced, though perhaps not quite to the same degree. There are, besides these, the parishes of St. Munchin and St. Patrick,* which are in a great degree suburban and rural, and inhabited principally also by the lower classes. The New town, consisting principally of the parish of St. Michael, presents a remarkable contrast to the portions hitherto described. It has been nearly all built within the last fifty years, and is exceedingly handsome. It consists chiefly of the dwellings of the wealthier shop-

* The Roman Catholic division of the parishes is used in these descriptions, as it is the one usually adopted by the classes of whom these enquiries were made.

Curves illustrative of the different rates of mortality in Limerick & England



keepers, merchants, and resident gentry of the city. Strangers, when they observe the elegance of the houses in this part of the town,—the neatness of the equipages, and the gay dresses of the more respectable portion of the inhabitants, can never understand how Limerick can possibly contain so much poverty as is reported; and even the inhabitants themselves of this part, whose business scarcely ever leads them into the older portions, have little conception how human life is wasting within a few hundred paces of their doors. The medical men of the city, and the Roman Catholic clergy, could easily undeceive them.

As this enquiry goes back over a good many years, and will therefore be supposed to be subject to all the looseness arising from defect of memory, it is necessary to say a few words on the degree of exactness that is capable of being obtained by the mode in which it was conducted. The following circumstances will enable us to form some judgment upon this point.

After I had obtained the deaths and other particulars occurring in nearly 800 families, it became necessary to form an index, to avoid repeating them. In doing this, I found that these particulars were taken down twice over in about forty cases, and I was startled on observing that there were in many instances very considerable differences in the two accounts. There were not only differences in the ages and in the assigned causes of death, but there were even differences in the numbers stated to be living and dead in these families. Though I found afterwards that this arose from my having in several cases obtained the accounts from different individuals, some of whom mentioned circumstances which others omitted, it was yet sufficiently discouraging; and as it was a point of primary importance, I took the trouble to tabulate the two accounts, for the sake of noting the differences more particularly. The following are the results.

Dividing the ages into classes of “under 1 year,” “1 year and 2,” “3 and 4,” “5 to 9,” &c., there were among the ages of 171 living persons differences which in 30 instances would have removed them from one class to the next above or below it; and among the ages of 124 dead persons, differences which in 27 instances would have produced the same effect. The number of the living in the two accounts differed by only 1 per cent., while that of the dead differed by about 11 per cent. In 23 instances out of about 100, there were differences as to the assigned causes of death; but in 15 of these it seemed to be only a substitution of what they probably considered the cause of the disease for one of its symptoms, such as “diarrhœa” for “worm fever,” or “convulsions” for “teething.” In the remaining 8 there was no analogy between the diseases specified in the two accounts as the causes of death. The following are the mean ages of the living and dead, as given by the two accounts:—

	First Account.		Second Account.		Difference.
	Years.	Mos.	Years.	Mos.	Months.
Mean age of 39 fathers . . .	43	3	44	2	11
„ 38 mothers . . .	39	10	40	9	11
„ 94 living children .	12	3	12	8	5
„ 100 dead „	2	6	3	2	8

It will be observed that the errors as to age, number, and other circumstances, are greatest as regards the dead, and this is exactly what might be anticipated; for many of the particulars recorded occurred in years long past, and may therefore easily be supposed to have been affected by defect of memory. I have observed, also, that in general, for the same reason, the accounts were more unsatisfactory when obtained from very old people. These circumstances, being only natural, will perhaps lead us to place some confidence in those particulars in which the difference in the two accounts was but slight, such as those relating to the living. But even with regard to the dead, I think we may assume, that the number stated in the following tables is at least not less than the truth; for I observed that though the information I sought was in general imparted with great willingness, and without the least appearance of any settled wish to deceive, it was very difficult in many instances to get mothers, from whom the accounts were in most cases obtained, to turn to such a painful subject as the loss of their children. Many of them wept bitterly while answering me, and I had reason to think sometimes that the strength of these feelings made them bring their relation to a close, before my catalogue contained the whole of the miserable truth. Besides, as they could have no idea of my object in collecting such information, and in general took my questions for part of the dispensary routine, I cannot imagine a motive for their making the deaths more numerous than they really were, still less for their giving the names and ages of children who never had any existence. From all this I think we may conclude:—

1st. That the numbers of the living given in the tables are correct, or very nearly so.

2nd. That the numbers of the dead are incorrect, but that those given are not less than the truth.

3rd. That the errors of age are greater in the tables of the dead than in those of the living, but that neither contain such an amount of error as on large numbers would greatly affect the mean age.

4th. That the assigned causes of death are more incorrect than the other particulars, but that even in these there must still be a considerable amount of truth, especially as regards the more obvious diseases, such as fever, small-pox, measles, &c., and the more distinct diseases of the respiratory system, such as phthisis, pleuritis, &c.

With these qualifications, which are quite necessary, I proceed to the tables. If any one feels inclined to discredit them from the circumstances I have mentioned, I would beg to remind him that better could not be done by this mode of ascertaining a mortality—that the enquiry was conducted with the utmost care of which its nature would admit, and that the value of many statistical enquiries supposed to be correct, would perhaps be shaken by such a severe scrutiny as I have adopted. Besides such qualifications cannot affect the strong evidence they contain, of the existence of a high rate of mortality among the lower classes of this city, the truth of which is confirmed by a comparison of the numbers living at different ages, with those in the Tables for England, in which it will be seen, that while there is a general conformity in their changes from the earlier ages upward, there is still such a deviation at the higher ages as is consistent with the supposition of such a high mortality. They also present other evidences of truth to those

who are accustomed to the study of vital statistics, and they must at least be believed to exhibit some approximation to the reality.

The first table is that of the deaths which had taken place in 1,017 families, up to the time of enquiry, with the ages at which those deaths occurred. I must mention one circumstance which had a tendency to produce incorrectness in these ages, *viz.*, a disposition to answer in round numbers. If a person was a year or so under or over 30, he was said to be 30 years of age, and the same may be said of 40, 50, and 60. Throwing the ages into classes differing by 5 years, is certainly in some degree a set-off against this source of error; still the effect of it is seen in the tables, about the ages just mentioned, which have numbers thrown upon them which should have been distributed over the intervening period. I have prefixed to this a table of the numbers living in these families, with their respective ages, that some opinion may be formed from it of the probable losses at each age.*

AGES.	TABLE I.			TABLE II.		
	Deaths at the undermentioned Ages in 1,017 Families of the Poorer Class in Limerick.			Living at the undermentioned Ages in 1,017 Families of the Poorer Class in Limerick.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 year . .	476	457	933	74	67	141
1 and under 3	446	373	819	153	116	269
3 " 5	173	192	365	128	117	245
5 " 10	141	136	277	267	279	546
10 " 15	34	37	71	216	211	427
15 " 20	29	29	58	130	217	347
20 " 25	20	17	37	163	205	368
25 " 30	24	13	37	166	219	385
30 " 35	40	17	57	217	232	449
35 " 40	27	9	36	112	137	249
40 " 45	43	9	52	147	136	283
45 " 50	13	6	19	67	79	146
50 " 55	23	7	30	120	97	217
55 " 60	12	3	15	30	31	61
60 " 65	25	6	31	57	53	110
65 " 70	2	1	3	9	17	26
70 " 75	3	..	3	16	10	26
75 " 80	3	..	3	5	4	9
80 " 85	1	..	1	3	1	4
85 " 90	..	..	..	..	..	..
90 and upwards	..	..	..	1	1	2
Ages unknown . .	32	39	71	25	41	66
Total	1,567	1,351	2,918	2,106	2,270	4,376
Not in Limerick. .	..	..	58	55	25	80
Still-born	117	53	170	..	..	..
" sex unknown	..	..	26	..	..	..

* Since this was written I have, through the kindness of Mr. W. Farr, received a copy of the Second Report of the Registrar-General, who observes upon this tendency in very nearly the same terms, and gives it as one of the reasons for adopting a quinquennial classification in the ages. He gives some remarkable instances, taken from the Preface to the Population Returns for 1831, to shew the force with which it operates. Indeed no one who has ever been engaged in taking down the ages of a considerable number of persons, could at all overlook it.

In this table, subtracting 71 deaths which occurred at ages unrecorded, from 2,918, the total number of deaths, we see that out of 2,847 deaths at all ages there occurred—

Under 1 year	933	=	32·8	per cent. or	three-eighths.
,, 3 years	1,752	=	61·5	,,	five-eighths.
,, 5 ,,	2,117	=	74·3	,,	six-eighths.

We see also that there occurred—

Between 50 and 60	only	45
,, 60 ,, 70	,,	34
,, 70 ,, 80	,,	6
And above 80	,,	1

The annexed table of the living, shews also the small portion of persons who have reached high ages in these families. We see by it that out of 4,310 persons, whose ages were ascertained, there were living—

Between 50 and 60	only	278
,, 60 ,, 70	,,	136
,, 70 ,, 80	,,	35
And at 80	,, upwards	6

All the deaths, as I have said, occurred since the period of marriage, and the duration of this term was taken down in about 789 families. From this the mean duration was found to be 17·98, or nearly 18 years, and this mean term was assumed for the rest. Dividing now, 2,918, the total number of deaths, by 18, we have 162·11 for the mean annual number of deaths; and to find the mean number living out of which these deaths occurred,—since 1,017 married couples, or 2,034 persons, had increased in 18 years to 4,376, they would in about 10½ years,* have amounted to 3,205 persons, or the mean number. This, therefore, is the number of the living out of which the above deaths may be supposed to have occurred, and would give a mean annual mortality of about 5·05 per cent., a number consistent enough with the general characters of the tables.

This high rate of mortality is no doubt in some degree owing to local circumstances—to the closeness of the habitations—the numbers by which they are occupied—and the narrowness and filth of the lanes; but as these are not worse than are to be found in the poorer parts of other towns, and as I see the mortality in none of them rated so high, I think its excess must be owing to its being separated from the mortality of other ranks, and considered alone; and therefore that it is to be attributed principally to the state of destitution and misery in which the lower classes always live, and to their daily privations of the comforts and necessities of life. These privations are in their last extreme in many of our Irish towns, and I shall have occasion to refer to them again

* These relations may be had from the equation $x = n \left(\frac{1+r}{r} \right)^q$ where

x is the present number of inhabitants, n , the original number, r , the rate of increase, and q the time. The value of r , in the present case, is about 23, making the rate of increase in these families about 1·23id per annum. It must be remembered, however, that they are taken in the time of their greatest productiveness, *viz.*, from the period of marriage 18 years forward. The mean annual rate of increase in England, for 30 years from 1801 to 1831, was about 1·67th of the whole. In Ireland, for 90 years from 1731 to 1821, it was about 1·73id, and for 10 years from that to 1831, about 1·75th.

afterwards ; but that the selection of a particular class is the main cause of the mortality appearing so high in the tables I have given, is evident from the deaths that occur in a different class in the same city. The following are the deaths that have occurred in three Tontine societies established in Limerick, in the years 1807, 1811, and 1814.

In the tontine of 1807, the original nominees were 95, and there had been 29 deaths in 33 years, or 1 in 108 annually.

In the tontine of 1811 the original nominees were 35, and there had been 12 deaths in 29 years, or 1 in 81 annually.

In the tontine of 1814 the original nominees were also 35, and there had been 5 deaths in 26 years, or 1 in 182 annually.

The calculation I have given above would make the deaths among the poor in this city about 1 in 19 annually, if the families among whom my enquiries fell truly represent their condition.

As an instance of the small knowledge of the value of human life displayed in the selection of lives for these tontines, I may mention the fact that the proportion of male to female nominees was 106 to 59 ; that several of the lives chosen were from 1 to 5 years of age ; and that one was that of an infant a month old.

These two series of facts—the deaths in these tontine societies, and the deaths among the poor—may be considered to represent the extremes of mortality,—the maxima and minima of the waste of human life in this city. It is evident from them that any general table of mortality founded upon *all* the deaths that occur in any city similarly circumstanced, must be a mixture of the mortality of many different classes, and can only form a safe basis for insurance when applied to that class in which the mortality is least ; I say least, because the tendency on the part of the public to speculate in insurances may make it unsafe to apply it even to a class in which the mortality is a mean. On the other hand, if such a table were to form the basis for calculations for Friendly Societies, which consist for the most part of people of the humbler ranks, it is equally clear, that as these form much the larger portion of the whole mass, premiums thus deduced must be much too low, and must necessarily end in ruin. This difficulty has long been felt by persons interested in calculations on the duration of human life ; but I believe they have not had any conception of the great space that lies between the extremes. Insurance companies seem aware of it, for they have always shrunk from effecting insurances among the lower classes. It is true these tontine societies have not yet run their course ; still they have, one with another, run through a period of 29 years with a very slight mortality. Many of the lives in them are even now young, and the difference appears to me so remarkable, that it has made me exceedingly anxious to see some steps taken for ascertaining the mortality of different classes in Ireland in such a manner as would enable us to distinguish the quantities attributable to each.* This knowledge, if obtained, would be of the

* I have ventured to suggest a plan to Lord Morpeth, by which, as there is no Act for the registration of births, deaths, and marriages in Ireland, the information necessary for this purpose may be had with great facility. which is, to authorize the enumerators in the census of 1841 to ascertain and note down the deaths that have occurred in each family during the 12 months last past. This additional enquiry would be attended with very little additional trouble, and with no addi-

greatest practical importance. If there be a mortality attributable to poverty—to the want of clothing, food, and fire; and a mortality attributable to the closeness of crowded rooms, the narrowness and filth of streets, and other circumstances which are its ordinary attendants, it is obviously necessary to see how far the sum of these exceeds that which occurs among a class placed in different circumstances, before we can hope to do anything for its diminution, or even devise a rational plan for attaining that object. But it is also extremely important in another point of view. If, as I have before said, premiums or payments of Friendly Societies, founded on a general mortality, without distinction of class, must necessarily terminate in ruin when applied to the poorer classes, it follows, that to be safe when so applied, they must be so high as would place it quite out of the power of these classes to take advantage of them; and thus the very people to whom such societies would be most useful, who are most subject to the calamities against which they were intended to provide, are, until some means are taken to ascertain and lessen the mortality, totally deprived of the only mode by which they could hope to guard against them. There was a time when the Amicable Society thought it necessary to charge a premium of 5*l.* annually for every 100*l.* insured on *all ages under 45* without distinction. We are now in precisely the same predicament with respect to class; and I am convinced that when we have obtained sufficient information upon the subject, it will be found to be nearly, if not quite, as influential an element in increasing or lessening mortality as age.*

Table III. gives the proportion out of 1,000 registered deaths which have occurred at various ages in these families, and shews very strongly the large number that take place at the early ages, and the very small proportion that occur at the later. I have annexed to it a table of the same kind for all England and Wales, taken from the First Report of the Registrar-General, which exhibits remarkable differences at those periods.

These differences are shewn more remarkably in the curves in the opposite table, which bring them at once before the eye. The dotted line represents the proportions among the poor of Limerick. When

tional expense. It would furnish an account of the deaths occurring in every street, lane, and alley, and at the same time the number of living persons out of which these had occurred would be absolute, and not, as in ordinary cases, depending upon estimate or calculation. Nothing scarcely is known of the actual mortality of Ireland, and the facts collected by this simple arrangement would be of such vast practical utility, that I have the strongest hope his Lordship may be induced to adopt the suggestion.

* It is impossible to speak on this subject without referring to the valuable approaches which have been made towards these distinctions by Mr. Farr, in his admirable letters contained in the First and Second Reports of the Registrar-General for England and Wales. The discussions on the "Diseases of Towns and of the Open Country" point directly to the effect of those circumstances, which often accompany distinctions of rank or class, and may be said roughly to indicate the localities of those personal privations which, in conjunction with them, have a tendency to add to the mortality. If it were possible to distinguish the mortality of different classes of the population in the east districts of London, I have no doubt that the higher mortality assigned to that quarter would be found to be very unequally distributed among those classes.

TABLE III.—*Proportion out of 1,000 Registered Deaths which have occurred at various Ages in 1,017 Families of the poorer class in Limerick, and in the whole of England and Wales.*

AGES.	LIMERICK.			ENGLAND and WALES.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 year . .	310·09	348·32	327·71	234·66	193·72	214·54
1 and under 3	290·55	284·30	287·67	127·17	128·85	128·00
3 " 5	112·70	146·34	128·20	47·57	49·47	48·51
5 " 10	91·85	103·66	97·29	45·89	46·27	46·07
10 " 15	22·15	28·20	24·93	24·57	27·30	25·91
15 " 20	18·89	22·10	20·37	30·96	37·48	34·16
20 " 25	13·03	12·96	12·99	39·02	43·50	41·22
25 " 30	15·63	9·91	12·99	35·00	39·97	37·44
30 " 35	26·05	12·96	20·02	33·05	37·42	35·20
35 " 40	17·58	6·86	12·64	32·38	34·25	33·30
40 " 45	28·01	6·86	18·26	32·91	32·69	32·80
45 " 50	8·47	4·57	6·67	32·60	30·65	31·64
50 " 55	14·98	5·33	10·53	32·12	30·80	31·47
55 " 60	7·82	2·28	5·26	33·54	31·42	32·50
60 " 65	15·91	4·57	10·88	40·51	40·64	40·57
65 " 70	1·30	0·75	1·05	41·05	41·83	41·43
70 " 75	1·95	..	1·05	42·95	44·95	43·93
75 " 80	1·95	..	1·05	40·30	43·46	41·85
80 " 85	0·65	..	0·35	30·48	34·89	32·63
85 " 90	..	..	..	16·97	20·86	18·88
90 & upwards	..	..	..	6·26	9·51	7·86

the curve crosses any of the perpendicular lines, the numerals at the sides enable us to judge how many die at the particular age marked at the top of it.*

The differences here are very striking, both at the earlier and later ages. The curve for England and Wales having been derived from large numbers, may be considered tolerably well established as a mean for the whole population, unless it may be influenced by epidemical fluctuations; but I am convinced that the great dissimilarity here exhibited is due rather to the selection of a particular class than to locality, although this last must, of course, have considerable weight. The healthiest locality, therefore, or the healthiest class, is that in which this curve starts from the lowest point, swells about the age of 70, and is most gentle and prolonged in its final descent.

The following table has been constructed to shew the proportions living at various ages in these families, supposing the males and females in them raised to 10,000 respectively; and, like the table of deaths, it exhibits a remarkable falling off at the higher ages. For the sake of comparison upon this point, a table of the same kind for all England, taken from the First Report of the Registrar-General, has been placed beside it; but great caution must be used in drawing inferences from this comparison, as it must be borne in mind that the heads of the families selected in Limerick were all married or widowed, and therefore the table exhibits an excessive proportion both of males and females between 20 and 50, as well as of children under 5 years of age.

* Since these curves were lithographed some slight corrections have been made in the proportions of deaths at different ages in Limerick, but the differences are very insignificant.

TABLE IV.—*Proportion of Persons living at the undermentioned Ages in 1,017 families in Limerick, and in the whole of England; supposing (for the sake of comparison) that the number of Males and Females whose ages have been obtained in these places were 10,000 respectively.*

AGES.	1,017 Families in Limerick.		England.	
	Males.	Females.	Males.	Females.
Under 5 years	1,706	1,345	1,538	1,444
5 to 10	1,253	1,251	1,343	1,268
10 15	1,038	946	1,169	1,056
15 20	624	973	988	995
20 30	1,581	1,902	1,470	1,684
30 40	1,581	1,655	1,155	1,210
40 50	1,028.3	964.5	941.0	932.6
50 60	720.8	574.2	665.6	653.3
60 70	317.1	314.7	447.6	458.0
70 80	100.9	62.8	221.9	228.2
80 90	14.41	4.5	56.25	64.85
90 & upwards	4.80	4.5	4.27	5.97

On reference to Table II. of the living, it will be seen that one male and one female at 90 and upwards are here represented by 4.80 and 4.5, numbers about equal to those in the table for England at that age. This appearance of longevity, however, is quite fallacious, and is merely an effect of calculations founded on small numbers. Its fallaciousness is shewn by the rapid falling off of the numbers from the age of 60 and upwards in this table, as compared with those in the table for England.

The following table exhibits the principal causes of death, with the ages at which the deaths occurred, thrown into terms of 5 years:—

TABLE V.—*Principal Causes of Death.*

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards.	Total.
Epidemic, Epidemic, and Contagious Diseases.	Cholera	24	20	8	8	14	11	6	4	2	1	..	98
	Small-pox	333	55	5	..	..	..	..	..	..	..	..	393
	Measles	187	32	6	1	..	..	..	..	..	..	..	226
	Scarlatina	8	2	..	..	..	..	..	..	..	..	..	10
	Whooping Cough	84	10	1	..	..	..	..	..	..	..	..	95
	Croup	85	9	1	..	..	..	..	..	..	..	..	95
	Diarrhoea and Dysentery	108	19	1	1	1	4	6	6	3	3	..	152
	Fever	70	33	13	15	8	11	11	5	3	..	..	169
Total		899	180	35	25	23	26	23	15	8	4	..	1238
Diseases of the Nervous System.	Cephalitis . . . . .	..	1	2	..	4	1	..	1	..	..	..	9
	Hydrocephalus	13	11	..	1	..	..	..	..	..	..	..	28
	Apoplexy . . . . .	..	..	..	..	..	1	2	..	..	..	..	3
	Paralysis	2	1	1	1	..	3	1	..	..	..	..	9
	Convulsions	569	18	5	1	..	..	1	..	..	..	..	594
	Epilepsy	1	..	..	..	2	1	..	..	..	..	..	4
	Delirium Tremens . . . . .	..	..	..	..	..	2	..	..	..	..	..	2
	Insanity . . . . .	..	..	..	..	1	..	..	..	..	..	..	1
	Mental Suffering . . . . .	..	..	..	..	..	..	..	1	..	..	..	1
	Disease	1	..	..	..	..	1	..	..	..	..	..	2
Total		586	34	8	3	7	9	4	2	..	..	..	653

TABLE V.—Principal Causes of Death—(continued.)

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards	Total.
Diseases of the Respiratory System.	Laryngitis	8	1	..	..	..	..	..	..	..	..	..	9
	Quinsey	4	1	..	1	..	..	..	..	..	..	..	6
	Bronchitis	37	1	1	1	..	1	4	3	6	1	..	55
	Pleurisy . . . . .	..	..	..	1	..	3	3	3	1	..	..	11
	Pneumonia	8	1	1	1	..	2	2	..	2	..	..	17
	Asthma . . . . .	..	..	..	..	..	1	1	..	1	..	..	3
	Consumption	8	13	13	19	25	33	18	11	8	..	..	143
	Disease of Lungs	7	1	..	..	..	..	..	..	..	..	..	8
Total.		72	18	15	23	25	40	28	17	18	1	..	257
Disease of the Heart. . . . .		..	1	..	..	1	..	..	1	..	..	..	3
Diseases of the Intestinal Canal.	Teething	36	..	..	..	..	..	..	..	..	..	..	36
	Gastro Enteritis	3	4	..	..	1	..	1	..	..	..	..	9
	Peritonitis . . . . .	..	..	..	..	1	1	..	..	..	..	..	2
	Ascites. . . . .	..	..	1	..	3	1	..	..	..	..	..	5
	Hernia.	5	..	..	..	..	..	..	..	..	..	..	5
	Worms	10	2	..	..	..	..	..	..	..	..	..	12
	Disease of the Di- gestive Organs. }	13	..	1	..	1	..	2	..	1	..	..	18
Total.		67	6	2	..	6	2	3	..	1	..	..	87
Disease of Liver.		5	1	..	1	..	1	1	..	..	..	..	9
Childbed . . . . .		..	..	..	..	5	7	2	..	..	..	..	14
Diseases of Uncertain Seat.	Scrofula	2	3	2	..	..	..	..	..	..	..	..	7
	Atrophy	151	12	..	..	..	..	..	..	..	..	..	163
	Dropsy.	3	3	3	1	1	2	1	1	1	..	..	16
	Abcess.	15	1	1	..	..	..	..	..	..	..	..	17
	Mortification	3	2	..	..	..	..	..	..	..	..	..	5
Total.		174	21	6	1	1	2	1	1	1	..	..	208
Total of Diseases		1803	261	66	53	68	87	62	36	28	5	..	2469
Violent Deaths		6	..	2	2	1	2	4	1	1	..	..	19†
Causes not specified		308	16	3	3	5	4	5	8	5	1	1	359
Ditto of Unknown Age. . . . .		..	..	..	..	..	..	..	..	..	..	..	71
Total of Deaths		2117	277	71	58	74	93	71	45	34	6	1	2918

The frightful excess of the first class, consisting of epidemic and endemic diseases, among the poor of Limerick, may be gathered from the following fact—that while the per-centage proportion of this class to

* The number stated to have died of convulsions is undoubtedly much too large. It is a custom with the poorer classes in Ireland, both in town and country, to attribute every obscure affection of which a child dies, especially about the age of infancy, to “convulsions.” We hear constantly, too, of their having “inward convulsions,” a term used when this symptom is not obvious to the eye. This, and the circumstance of its being a symptom which often attends the close of many infantile diseases, accounts for the very large number placed under this class.

† Among the violent deaths are included one in which the arm mortified from inoculation by small-pox; two from the sloughing of blisters, applied in one case for chin-cough, and in the other for “Burnt Holes;” one also in which a man was bled for pleurisy by an apothecary, who opened the brachial artery, and in trying to stop the hemorrhage bound the arm so tight that it mortified. Though these cases cannot strictly be called “violent deaths,” yet the lessons drawn from them are much of the same nature as those derived from that class of causes, and are more likely to be practically useful when so arranged. I have, therefore, placed them under that head.

the whole number of deaths in England and Wales in 1838 was under 20 (19·8); in the Metropolis and Leeds 26·1 and 26· respectively; in Manchester 23·2; in Birmingham 20; and in Liverpool 19·8; it is in Limerick not less than 40, or nearly five times as great as the proportion of deaths from diseases of the respiratory system, to which, among a healthy population, it ought to be nearly equal.*

The following table gives more particularly the ages at which the deaths by small-pox occurred:—

TABLE VI.—Deaths by Small-Pox.

	AGES.				
	Under 1 year.	1 and 2	3 and 4	5 to 9	Above 9
Males . .	33	72	37	29	2
Females .	52	92	47	26	3
Total .	85	164	84	55	5

It is obvious, from this table, that the Vaccination Act just coming into operation in England was not less necessary for Ireland than for that country. It appears, too, that the disease was more fatal to females than to males; a result different from that observed by Mr. Farr, in his letter to the Registrar-General, contained in the First Report of the latter. 16 of the cases in the above table arose from inoculation; I have not ascertained whether any of them were vaccinated.

The following table gives the diseases with which the living were found affected at the time of the enquiry. Under the term "Various Diseases" are included cases of general delicacy, debility, diseases of the eye, with a number of neuralgic affections; and under that of "Diseases" attached to the intestinal affections, are included all gastro-enteric disorders, whether painful or otherwise, not included under the previous heads. I must also remark, that under the term "Bronchitis, acute and chronic," are included all cases of coughs and severe colds affecting the bronchial membrane.

TABLE VII.—Diseases of the Living.

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards.	Total.
Endemic, Epidemic, and Contagious Diseases.	Small-Pox	13	1	..	..	..	..	..	..	..	..	..	14
	Measles	5	12	1	..	1	..	..	..	..	..	..	19
	Hooping-Cough . .	6	3	..	1	..	..	..	..	..	..	..	10
	Thrush	2	..	..	..	..	..	..	..	..	..	..	2
	Diarrhoea, and } Dysentery . . . }	29	7	3	1	2	7	2	2	..	..	..	53
	Fever	32	13	3	2	2	5	2	1	..	..	..	60
Total		87	36	7	4	5	12	4	3	..	..	..	158

* "Wherever the absolute mortality is low, the number of deaths in the epidemic class is less than the number in the pulmonary class; and on the contrary, wherever the deaths in the first class exceed or equal those in the third, it may be affirmed that the absolute mortality is high."—*App. to 1st Report of Registrar-General, Ser. Ed., page 111.*

TABLE VII.—*Diseases of the Living*—(continued).

DISEASES.		Under 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90 & upwards.	Total.
Diseases of the Nervous System.	Paralysis . . . .	..	1	..	..	..	3	3	..	..	..	..	7
	Epilepsy . . . .	..	..	..	..	4	1	..	..	..	..	..	5
	Total . . . . .	..	1	..	..	4	1	3	3	..	..	..	12
Diseases of the Respiratory System.	Bronchitis, Acute and Chronic	8	..	3	3	8	20	21	24	18	5	..	110
	Pleurisy and Pneumonia . . . .	..	..	..	..	5	10	2	3	6	1	..	27
	Asthma . . . . .	..	..	..	1	..	..	..	2	3	..	..	6
	Consumption . . . .	..	..	5	3	9	3	2	3	..	..	..	25
	Diseases of the Lungs	5	1	..	1	3	6	2	2	..	2	..	23
Total		13	1	8	8	25	39	27	34	27	8	..	190
Diseases of the Intestinal Canal and Liver.	Teething	3	..	..	..	..	..	..	..	..	..	..	3
	Ascites . . . . .	..	..	..	..	..	..	2	..	..	..	..	2
	Worms	8	13	7	..	2	..	..	..	..	..	..	30
	Hepatitis, Acute, and Chronic . . . .	..	..	..	..	2	3	2	..	1	1	..	9
	Disease	6	..	2	2	17	29	14	11	7	..	..	88
Total		17	13	9	2	21	32	18	11	8	1	..	132
Generative System.	Paramenia . . . .	..	..	..	5	3	3	1	..	..	..	..	12
	Motory System.	..	..	..	2	6	8	10	14	4	1	..	45
Diseases of uncertain Seat.	Scrofula	4	5	..	..	..	..	..	..	..	..	..	9
	Atrophy	5	..	..	..	..	..	..	..	..	..	..	5
	Dropsy . . . . .	..	1	..	..	..	1	2	1	1	..	..	6
	Integumentary System	36	13	12	5	9	4	7	5	7	1	1	160
	Wounds, Acci- dents, &c.	3	2	2	2	5	..	3	4	2	1	1	25
Various Diseases . . .		21	17	15	16	31	38	29	26	18	2	1	214
Total.		186	89	53	44	109	138	104	101	67	14	3	908

TABLE VIII.—*Proportion of Sick to the Population at different Ages.*

AGES.	Number Living at each Age.	Number Sick at each Age.	Per-centage Proportion of Sick to the Number Living at each Age.
Under 5 years	655	186	28.39 or one in 3.5
5 to 10	546	89	16.30 „ 6.1
10 15	427	53	12.41 „ 8.
15 20	347	44	12.68 „ 7.8
20 30	753	109	14.47 „ 6.9
30 40	698	133	19.77 „ 5.
40 50	429	104	24.24 „ 4.1
50 60	278	101	36.33 „ 2.7
60 70	136	67	49.26 „ 2.
70 80	35	14	40.00 „ 2.5
Above 80	6	3	50.00 „ 2.
Unknown	66	..	.. ..
Total. .	1,376	908	20.69 „ 4.8

How admirably the foregoing table exhibits the susceptibilities of childhood, and the growing infirmities of age. It has been calculated from Table VII. and from that of the living, No. II.

The general uniformity of the results here displayed will serve to create confidence in the particulars collected regarding the living. The table represents the proportion of the sick to the population at all ages, and including all classes of disorders, at rather more than 20 per cent., or 1 in 5, at the time of the enquiry. But these diseases were the cause of the parties applying at the Dispensary, they may therefore be considered as selected on account of them; and the proportion of sick to healthy in these families cannot correctly represent the proportion of sick to healthy among the whole mass of the poor. It would appear from this table, too, that the age of least mortality is also the age of least sickness, *viz.*, from 10 to 20.

It might be supposed that the proportion dying at different ages could be obtained in the same manner, and something like a mortality table be constructed, which might be compared with the Carlisle, or any other similar table. With this view I drew up the following statement of the number of children who had died, or were still living, at each age, which is the best foundation for such a table that my data will afford. But it

Number of Children Living and Dead in 1,017 Families of the poorer class in Limerick, distinguishing the Ages.

AGES.	Living.			Dead.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 year	74	67	141	476	457	933
1 and under 3	153	116	269	446	373	819
3 " 5	128	117	245	173	192	365
5 " 10	267	279	546	141	136	277
10 " 15	216	211	427	34	37	71
15 " 20	130	217	347	29	29	58
20 " 25	128	142	270	20	17	37
25 " 30	69	76	145	7	5	12
30 " 35	56	45	101	12	5	17
35 " 40	25	14	39	2	3	5
40 " 45	13	8	21	2	1	3
45 " 50	4	1	5	..	..	..
50 " 55	3	..	3	..	..	..
Ages unknown	18	23	41	20	18	38
Soldiers, Emi- grants, &c. }	55	25	80	35	14	49
Total . .	1,339	1,341	2,680	1,397	1,287	2,684

will be seen, that as one-half of the individuals are still living, and as the observation of their lives did not begin at the same period, no deductions can be drawn from the table, without making an estimate of the annual deaths that would occur among those still living, which is the very point we seek to ascertain. In order to calculate the deaths under 1 year, it would be necessary to add to 933, the number already dead under that age, a certain unknown proportion of 141 who had not yet completed their first year. So, for the second term, there should be added to 819 a proportion of the 269 who had completed their first but had not attained their third year, together with a similar proportion of

the survivors of the 141, who would then have entered the second class. Each further term would thus be liable to an additional uncertainty; and for this reason, I am unable to furnish a mortality table worthy of credit. My enquiries, however, into this immediate point, which were made subsequent to the completion of this memoir, have led me to the belief that other large towns may be found in which the mortality is little, if at all, inferior to that which I have observed at Limerick. But this, though it may deprive Limerick of an unenviable pre-eminence, proves the existence of a still greater amount of those evils to which I would call attention, with the hope of awakening the sympathy, and arousing the efforts, of the public, and of persons possessing authority to remove or lessen them.

Productiveness and Loss of Children.—The following table is very curious; it exhibits the power of production and amount of loss in these families, and it has been thrown into this form to shew how general was the destroying influence. Great losses in a few families may arise from constitutional circumstances, but few being exempt from loss must indicate some general agency. Tables of this nature, if founded on a sufficient number of observations, would be useful to those offices which engage for a premium, beginning at marriage, to endow each child born of such marriage on its coming of age; but to do business by this table would certainly not be doing it on what is called the *safe* side. The table is read thus:—If, for instance, we want to find how many families had seven children each, on a line with the figure 7 in the first column, we find that one family had 7 still-born children; 95 families had 7 living children each, and 37 families had lost 7 children each. The still-born are included among the lost in the last column.

TABLE IX.—*Productiveness and Loss of Children.*

Number of Children.	Number of Families who had Children.		
	Still-Born.	Born Living.	Lost.
0	895	22	153
1	80	76	196
2	20	109	170
3	16	104	142
4	4	128	102
5	1	102	98
6	..	114	44
7	1	95	37
8	..	69	20
9	..	75	12
10	..	53	7
11	..	24	7
12	..	19	1
13	..	6	1
14	..	6	3
15	..	7	1
16	..	1	..
17	..	2	..
18	..	1	..
	..	Omitted 4	Omitted 23
Total .	1,017	1,017	1,017

TABLE X.—*Productiveness and Loss in different Parishes.*

Number of Children.	St. Munchin's, &c.		St. Michael's and St. John's.		St. Mary's.	
	Families who had Children.		Families who had Children.		Families who had Children.	
	Born Living.	Lost.	Born Living.	Lost.	Born Living.	Lost.
0	3	23	8	94	11	36
1	6	35	51	93	19	68
2	11	21	56	87	42	62
3	12	25	51	68	41	49
4	23	19	68	51	37	32
5	20	24	56	44	26	30
6	23	5	47	22	44	17
7	14	6	42	19	39	12
8	10	4	39	11	20	5
9	16	3	39	4	20	5
10	13	..	26	5	14	2
11	7	..	6	6	11	1
12	6	..	12	1	1	0
13	2	..	2	..	2	1
14	1	..	3	..	2	3
15	1	..	4	..	2	1
16	..	..	0	..	1	..
17	..	..	1	..	1	..
18	..	..	..	..	1	..
Omitted	168	165	511	505	334	324
	10	3	..	6	..	10
Mean No. of children born and lost to each family	6.25	2.90	5.22	2.79	5.36	3.05
	Per centage of loss on the number born	.. 45.61	.. 51.87	.. 55.28	..	..

This table is read in the same manner as the last. It may be seen by it, that in St. Munchin's and the suburban parishes, the largest number of children lost in any one family is 9, and the largest number born 15; that in St. Michael's and St. John's the largest number lost is 12, and the largest number born 17; and in St. Mary's the largest number lost is 15, and the largest number born is 18.

Thus there seems some proportion between the number lost and the number born; and it will be observed that the per-centage of the numbers lost on those born, is in these parishes 45, 51, and 55, respectively. It may be imagined that the greater number lost in the two last-named parishes is a consequence of the greater number born; but the course of things in St. Munchin's and the rural parishes contradicts this, for we see there that while the mean production is as high and even higher than in the closer parts of the town, there is an absence of the high numbers on the comparative condition of these two parishes, would apply more correctly to the past state of things than to the present, for many of the old houses in St. Mary's have tumbled down within the last few years, from which circumstance I believe that, although both parishes are exceedingly wretched, a greater degree of misery and want would now be found in that of St. John's.

born in single families, for which these last are remarkable. It is true that the fact of the productiveness being on the whole higher in the suburban parishes (where the mortality is least), bears against this view; but the rate of production is very high in all the parishes, and I doubt whether its excess in these parts may not be an accidental circumstance arising from small numbers. The subject is very curious; and it is an interesting question, whether the great power of production manifested in these circumstances,—the only vital power then unsubdued,—is not an effort of nature to contend against those destroying agencies which would otherwise sweep off whole races.

Death of Parents and Second Marriages.—Of the parents there died in the 18 years specified, 200 men and 65 women. 20 men had married a second, and 1 a third time, and 31 women had married a second time. The surviving parents were, therefore, 1,821, and 265 deaths on this number is about 14·55 per cent. in the 18 years, or 0·8 per cent. per annum. The number of second and third marriages may be somewhat more than is here stated, as they were not always very strictly enquired into. It is shewn by this and the following calculation that by far the larger portion of the mortality has occurred among the children. In the 1,017 families there were found, at the time of the enquiry, the numbers undermentioned:—

Total number living (excluding emigrants)	. . . . .	4,376, or 4·3 to a family.
Children, living	ditto	2,600 2·55 , ,
Children, dead	. . . . .	2,635 2·59 , ,
Total children, including still-born, emigrants. &c.		5,560 5·46 , ,

The disproportion here is very remarkable between the total number born and the number still living, particularly as so few of the deaths occurred at an advanced age.

Ages at Marriage.—Of 749 men and 735 women, the following table shews the number who married at the different ages specified in it. They were obtained by subtracting the term, during which marriage had been ascertained to have lasted in each family at the time of the enquiry, from the present age of the parties:—

TABLE XI.—*Ages of Males and Females at Marriage.*

Ages.	Persons.		Ages.	Persons.		Ages.	Persons.	
	Males.	Females.		Males.	Females.		Males.	Females.
13	..	4	29	23	12	45	2	..
14	..	7	30	26	21	46	1	1
15	1	20	31	20	6	47	3	1
16	8	50	32	22	12	48	1	1
17	20	48	33	17	8	49	1	..
18	29	68	34	13	5	51	2	..
19	40	72	35	18	3	52	1	..
20	72	83	36	12	3	53	1	..
21	55	58	37	5	6	54	2	..
22	53	46	38	8	..	56	1	..
23	55	43	39	7	1	57	2	..
24	42	38	40	7	4	60	1	..
25	47	42	41	7	2	66	1	..
26	41	31	42	3	1	73	1	..
27	41	26	43	3	..	Total	749	735
28	33	12	44	1	..			

The extremely early age at which many of these marriages took place will, no doubt, surprise most people very much. I have reason to think they are not very incorrect; and those which occurred at the very early ages stated were always strictly enquired into. Of the 4 females stated to have been married at 13, two were well authenticated instances that occurred in the country, one of these had her first child at 14. The other two took place in the city, and were actually not quite 13 at the time of marriage. In one of these instances, when I said to the mother, "This girl must have been exceedingly anxious to get married to marry so very young," she replied, "Oh no, sir, she knew nothing about marriage, nor what belonged to it. The priest sent her away three times before she was married, he thought her so young." In general, I believe, these early unions are brought about entirely by the parents, as in this instance, when an eligible choice offers; the temptation to which is the stronger from the circumstance that the children of the more comfortable of the lower classes will often marry against their parents' wishes, under the more fully-formed feelings of a riper age. These early marriages are sometimes very fruitful. Calculations founded on this table give the mean age at marriage for men, 26·1 years, and for women, 22 years.

In the earlier part of this year the Committee of the Limerick Lying-in Hospital, a small but excellently arranged institution, adopted, at my suggestion, a form of registry for lying-in charities, recommended by the London Statistical Society; from this record I have formed the following table of the ages at which the marriages of 342 women took place. This register is kept with great care by all the medical officers of the institution, and I think the particulars noted in it are as accurate as those in any other establishment of the kind. The table gives 22·3 years as the mean age at marriage of these 342 women—a result differing very little from that deduced from the former Table.

TABLE XII.—*Ages of Females at Marriage.*

Ages.	Females.	Ages.	Females.	Ages.	Females.
15	9	26	15	37	..
16	10	27	20	38	..
17	12	28	10	39	..
18	27	29	6	40	1
19	28	30	2	<div style="border: 1px solid black; padding: 5px;"> Total . . 342 Unmarried 19 Widows . 2 <hr/> Total . . 363 </div>	
20	46	31	4		
21	25	32	3		
22	36	33	2		
23	29	34	..		
24	28	35	4		
25	24	36	1		

Occupations.—In 856 instances the occupations of the heads of families were enquired into, and the following table exhibits a list of them in the order of the numbers belonging to each. Those under the head of "Labourers" are usually employed about the stores and other places of business; they generally turn their hands to anything that offers in the way of work, and are for the most part half their time unoccupied.

TABLE XIII.—*Occupations of Adults.*

Occupations.	No.	Occupations.	No.	Occupations.	No.
Labourers. . .	369	Pig Jobbers . .	11	Corn Buyers . .	5
Shoemakers . .	50	Retailers . . .	11	Brokers	5
Tailors. . . .	31	Slaters	10	Snuff Grinders .	5
Weavers . . .	29	Clerks	10	House Painters .	4
Smiths	22	Sawyers	8	Tobacco Spinners	3
Carpenters . .	22	Carmen	8	Marble Polishers	3
Masons	21	Watchmen . . .	7	Curriers	3
Coopers	20	Gardeners . . .	7	Brushmakers . .	3
Servants . . .	19	Schoolmasters .	6	Other occupations	91
Pensioners . .	14	Hat Dressers . .	6		
Nailers	13	Butchers	6	Total	856
Bakers. . . .	12	Boatmen	6		
Ropemakers . .	11	Wool Combers .	5		

Condition of the Poorer Classes, and Causes of Mortality.—In enquiring into the occupations of families given in the above table, I was continually met by the answer—"A labourer, sir, when he can get anything to do,"—or, "a labourer, a week at work and a fortnight idle,"—or, "one day at work and three days idle," or,—“a week at work and a month idle.” These expressions were so common that I do not think there was an exception to this mode of answering, at least on the part of the labouring portion, in almost any one of the instances enquired into. The observation applies with a little less degree of force to the tradespeople who fell in my way during this investigation, although many of them were, from the same cause, in a state closely bordering on destitution; but the labourers, who it will be seen by the above table bear a more than ordinary high proportion to those in other employments, seem to suffer most. I have known, myself, one instance in which an able-bodied labourer was not able to obtain one full day's work from Christmas-day to the middle of February. I have had lately under my care in the County of Limerick Infirmary a case of mild insanity, with partial paralysis of the right side. I visited this man at his own home before his admission to the infirmary; he had been some months out of employment, and his friends attributed the attack to the excess of his joy on receiving a promise of constant employment for some time at a shilling a day. The women get employment where and when they can, at any kind of drudgery that offers; or very often they endeavour to carry on a little trade on some small savings out of their husbands' earnings, out of the profits of which they obtain a very scanty subsistence; or what is not uncommon, some better article of dress is pledged on Monday morning to obtain the little capital this trade requires, and is released on Saturday evening. I have known the husband's Sunday coat repeatedly released in this manner on Saturday evening for the purpose of being worn on Sunday, and returned to the pawn-office on Monday morning. As may readily be anticipated these miserable shifts do not always succeed. When the week's trade is unsuccessful, the coat remains in pawn, and on the Monday following some other article supplies its place; and so it goes on, until by some lucky chance they are again released, or, what is much more common, article

follows article, until every thing on which a penny can be raised is gone, and then comes the wind up. From this time forward there is a daily contest for even one day's existence, and the unhappy family is doomed to a course of privation and suffering, the very thought of which sickens the heart. The same thing takes place much more speedily if the husband or wife be attacked by sickness, or if the former gets a fall and is disabled, or by any other circumstance is rendered incapable of work; for owing to the small number of manufactures yet established in the city, and the great numbers who stand in need of employment, the earnings of the wife or daughters are not worth counting, and the whole family are mainly dependant on the husband for support; so that their being paupers, or not, depends upon his preserving his health and procuring employment. If either of these fails, the course I have above described commences.

This practice of pawning is carried on with much less disadvantage to the poor since the establishment of the *Mont de Piété* in this city; but the extent to which it prevails among the lower classes may easily be judged of by any person who walks through Mary-street at the rear of that establishment. He will there see a quantity of clothes hanging out in the street for sale, which is sufficient to surprise any body, obtained for the most part at the public sales of the different pawn-offices in the town; and offered to the public again on such terms as shew clearly how little advantage their original possessors derived from parting with them. Families driven to the straits above described, usually betake themselves to one of the decaying houses in the oldest part of the town, already overstocked with tenants, and occupy a single room there at from 4*d.* to 1*s.* a week, and for the rest contrive to get food when and how they can.

That the course I have above described is not a solitary instance, or the representative of a small number, may be believed when I mention that, in the worst part of the old town every room in these wretched ruined abodes is let to a separate family, and often to more than one. I have known myself several of those houses occupied by 8, 9, 11, 13, and I have heard that some of them are occupied by 16, families. I have seen three families living together in a room scarcely seven feet square! It would indeed be a most interesting subject for investigation, and one which I am sure would tend to great practical good—an enquiry into the condition of these poor strugglers—the number to each house—the rents they pay—their mode of obtaining a livelihood, and other particulars regarding them; but I fear I should not be able to devote sufficient time to it. Here, amid broken banisters, falling staircases, sinking floors, and shattered roofs that admit every blast, may be witnessed every variety of privation, misery, and suffering in all its horror, which it is possible for the human mind to contemplate. I have read all that has been written on the condition of the poor in Scotland and other places, and in nothing they describe do they exceed what is exhibited in Limerick. I have seen a wretched mother lying sick on a mat in the corner of a garret—her only covering a few rags—without a drop to wet her lips for three days but cold water—her husband dead, and three little children on the floor, who were frequently eight-and-forty hours without tasting a morsel of food! But this last is by no means an

uncommon occurrence among them, and sometimes the interval passed without food is much longer. I have seen children, not otherwise unhealthy, fall into a dropsical state and die from the absolute debility produced by repeated abstinence. I have known a wretched young creature, a widow, without clothing, food or fire, when every rag was pledged, place her dying infant between her lower limbs in its last moments in a position which it is not easy to describe, in order to keep some warmth in it while it was expiring.

One of the most astonishing things connected with these circumstances of distress is the patience and resignation with which they are accompanied. To think not only that the whole people should not rise up and cry out with one voice against such a state of things, but that we should be able, without police or military, to bring bread and meat through the streets, and take it into our houses, and eat it without interruption, is to me one of the most surprising instances of the recognition of the rights of property that any nation could possibly display. I cannot conceive it possible for any person of well-regulated habits of thought, to visit such scenes as I have described, and return to his daily blessings without trembling—without asking himself, with a shudder, what it is that gives him a title to such comforts, while thousands who breathe the same air and look at the same light—who are no worse in a moral point of view, and who in many instances—these trials not one of the least—exhibit religious feelings of infinitely greater depth and reality—are daily and nightly exposed to a degree of suffering that might be thought sufficient to atone for any crime. It may be thought unnecessary to dwell upon these circumstances, now that the Poor Law is just coming into operation, but I do so partly because I believe that it is not sufficiently understood how very much the amount of pauperism to be relieved will depend upon means directed to the preservation of the health of the poorer classes out of doors, and how much it may be increased, or diminished, by attending to or neglecting this circumstance; and partly because there are many persons still to be found who were averse to a provision for the poor before it became law—who contended that it would only produce an increase of pauperism—as if this were possible!—with whom the idleness of professional beggars—the daily and nightly thefts on industrious farmers, and the ditch-side morality of wandering multitudes went all for nothing; or, still worse, who looked to the actual amount of destitution and sickness among the really poor, as a means of lessening the population, and with the same short-sighted feeling still hanging about them, would now administer it with a niggardly and pinching economy as regards the public health, that will be sure to produce the very effect they have always so much dreaded. It is a poor argument for that *soi-disant* philosophy which has been gaining ground in later times, that it lends a strong sanction to these unchristian views. If it be not sufficiently obvious that one of the most expensive of all populations to the community is a sickly population, one may remark, that if the above principle be true—if it be really possible to diminish or check the growth of a population by this method,—we are only adopting half measures. To be consistent we should shut up our hospitals, abandon our institutions for the relief of the sick poor, and let death have his fling. When one considers the

spirit in which these opinions are sometimes urged, and the contrast between it and that feeling which animated the charities of an earlier age in these countries, it is only surprising that some one has not been found hardy enough to make this proposal. It is a melancholy circumstance that the falsehood of such principles will only be fully exposed when millions have suffered, and hundreds of thousands have been swept away in the trial; but that they *are* false is obvious from the tables I have given relating to the productiveness and loss of children. We see by Table IX. that while there was a loss of 2·59 children to each family, or 49·66 per cent. on the number born, there were still left 2·55 children to a family; or taking the total number of the living at the time of the enquiry, there was an average of 4·3 living persons to a family, a number which, notwithstanding the greatness of the loss previously sustained, falls very little short of 4·77, which, according to the census of 1831, is the average number to a family for all England, where the losses cannot have been at all so great. The particulars given at the foot of Table X. will also serve to shew how much is likely to be gained by any attempt to push such principles. In fact, this is a remarkable proof that in the vital sciences, as in the physical, any effort to contend against the powers of nature will be sure to end in defeat and failure.

These remarks on the necessity of paying extreme attention to the health of the poor out of doors, appear to me of extreme importance; because I have observed that among many of the families whose wretched circumstances I have described, there was still a feeling of independence that would make them shrink from accepting relief in a workhouse as long as it was at all possible to exist without it. Several of these poor people assured me they would be quite satisfied if they could by any means obtain a few potatoes once every day. Many of them were rather decent people who had once been better off, and were in general unwilling to complain, whose distresses I heard rather from others in the next rooms to them than from themselves; and in one instance, some children were pointed out to me not more than 5 or 6 years of age, who, I was told, would rather remain two days without food than go into the streets to beg. Nothing, indeed, can be more touching than the contrast between the silent endurance of these poor creatures, and the practised and persevering whine of the weather-seasoned street beggar. In the cities there are no means of ascertaining what the gains may be of the persons who follow this profession; but in the country they are infinitely better off than the labouring part of the population; and, what is very singular, the dearer the season, the greater is their advantage. A beggar, by receiving a few potatoes at every house, will collect above four stone of them in the course of the day, which, at 4*d.* a stone, is 1*s.* 4*d.*, about double the sum which a labourer could earn in the same time: and it must not be imagined that they will receive so much the less if it be a dear season. This is so far from being the case, that, it is to be feared, unless some means are adopted to check vagrancy, when the Poor Law Act is in operation, the country people will adhere to the practice of charity in this doubtful form with a scrupulous pertinacity. I know myself one poor widow who, in the scarce season, fearing she would be deprived of

the power of exercising this charity, measured over her heap of potatoes, and found that she would be only able to continue it by restricting herself and her daughter to two small meals each day, which plan she at once adopted; and so great were her scruples about doing justice to the poor, that she made it a practice, whenever a poor person called, to go to the heap of potatoes with her eyes shut, lest she should by any feeling be tempted to select those of indifferent size and quality. These things must not be considered unimportant as signs of the national disposition. That they are not solitary instances may be judged from the fact that, in the town of Askeaton, during the scarcity of this year, it is said that the poor of the town would not have known what to do, owing to the high price to which potatoes would have run, if it had not been for the quantities brought to the public scales for sale by the beggars!!

With regard to the classes who possess a more independent feeling, their universal complaint is want of employment. Some were pointed out to me as persons capable of doing any work, however fine, with their needles, but who could not obtain one hour's occupation. It is obvious that however desirable it may be to encourage those feelings of independence, they must inevitably languish and die away altogether under such depressing circumstances; and that if it is found impossible to devise any means of procuring them that constant employment which would make them perfectly independent, such attention should at least be paid to the preservation of their health, as may prevent them from being disabled for such occupations as occasionally fall in their way. It is impossible to insist too much upon this point as a means of diminishing pauperism, and it may be regarded as certain, that to the proper administration of a poor-law, the efficient working of our medical charities is as essential as any other circumstance whatever.

These remarks have run to a greater length than I had intended; and the only observations I have to make in addition, relate to those local circumstances which tend to affect the health of the lower classes. The principal of these, independent of the closeness and want of comfort of their rooms and houses, is the practice which prevails in the poorer parts of all our towns to a frightful extent, of making dung-pits, and keeping stagnant pools for that purpose, close by their doors. On this practice so much evidence has been laid before a Committee of the House of Commons this year, that it is unnecessary to say more at present than that it prevails in Limerick, about the old town, to a degree which is offensive, disgusting, and frightful to the last degree—every rut formed by a car-wheel is filled with the offal of some house near it; and there is scarcely a single door that has not a pit beside it into which the refuse of their straw beds, and every kind of filth is flung. The older part of the city, too, is remarkable for the narrowness and closeness of its lanes and the filth of its courts, with those other circumstances of importance to public health to which the attention of that Committee was drawn. It is obvious that these evils can only be fully remedied by some general legislation on the sewerage, drainage, and building in towns; and it is equally obvious that as they are circumstances which affect large masses of the population, they should be speedily remedied.

I was very anxious to prolong this enquiry, and to extend it to larger numbers, but the length of time which it occupied, the slowness with

which it went on, and an impression that rested on my mind throughout its progress, that the results would be much more unsatisfactory and uncertain than they have proved, made me bring it to a close. The only remark which I have to make in conclusion appears to me one of great importance: if mismanagement, neglect, and wretchedness of every kind, be capable of increasing so enormously the mortality of the human family, and if in general we observe it bear a proportion to their poverty, and the closeness and filth of their habitations, what may we not hope from a better system? May we not reasonably expect, by improving their domestic circumstances, to see it brought within bounds that were never anticipated?

Since the above was written, it has been suggested to me to subjoin to this paper the form used in the collection of the data, together with a second form by which it is proposed, at the close of each year, to obtain an account of the mortality and the quantity of sickness that has occurred in each family of the Temperance and other Friendly Societies in Ireland, from its commencement to its close.* The enquiry is intended to be conducted under the direction, and with the assistance, of the presidents and vice-presidents of the different societies, who are generally Roman Catholic clergymen, and always persons of some weight and influence with the members. I have already had communication with several of them, and they state that they do not anticipate any practical difficulty in getting such forms accurately filled. The utility of the results which may be obtained by such an enquiry is obvious. The want of a sufficient number of facts on the subject has long been felt by all those to whom the members of Friendly Societies are in the habit of applying for information, as to what ought to be the amount of their weekly contributions, and the allowances which they should make during sickness and at death. If the first are too high it shuts out a number of persons from the benefits of the society who might otherwise afford to become members; and, if the last are extravagant, there is an obvious injustice done to the later claimants. But it is clear that the persons to whom they thus apply, however expert as calculators, can give them no effective assistance without some facts to enable them to judge of the amount of mortality and sickness that is likely to occur, and these facts can only be supplied with facility by the societies themselves. If only fifty persons in every town would each undertake to obtain the particulars occurring in 100 families in his district, according to the form suggested, we should have then for every town the quantity of sickness, and the number of deaths occurring in the course of a year among 5,000 families, or above 25,000 persons. Also, if the same enquiry were set on foot in England and Scotland, as I earnestly hope it will be, and the same form adopted, it would not only be productive of similar advantages, but would furnish us with the direct means of comparing the mortality in this country with that occurring in Great Britain.

* See next page.

An Enquiry into the Condition of Criminal Offenders in England and Wales, with respect to Education; or, Statistics of Education among the Criminal and General Population of England and other Countries. By RAWSON W. RAWSON, Esq., Honorary Secretary to the Statistical Society of London.

[Read before the Statistical Society of London, 21st December, 1840.]

At the meeting of the British Association at Birmingham in 1839, I brought before the Statistical Section an Analysis of the Tables of Criminal Offenders in England and Wales, with reference more particularly to the influence which sex and age appear to exercise upon the commission of crime, and the peculiarities which exhibit themselves in different districts with regard to the nature of the offences committed, and the sex and age of the offenders. This paper was subsequently published in the Journal of this Society.* There remained one important point upon which information is afforded in the annual Criminal Tables, which was deferred for future investigation, *viz.*, the degree of instruction possessed by the offenders; and the result of my examination into this branch of the subject I now propose to bring before the Society.

Since the year 1835, the degree of instruction possessed by criminal offenders in England and Wales, has been recorded in the annual tables. It was introduced, I believe, at the instance of Mr. Porter, who took his idea, and the form of classification, from the French criminal tables, in which, as well as in the Belgian tables, the same information has been annually published since the year 1828. It is the result of the information afforded by the English returns, compared with those of the other parts of the United Kingdom and of other countries, which I am about to investigate.

In discussing the question of the influence which education exerts in the repression of crime, much misapprehension and error have arisen from a confusion of terms,—from treating mere instruction in the elementary arts of reading and writing as education; and the good or evil effects of the former have been frequently used as arguments in favour, or in detraction, of the latter. As the validity of the conclusions resulting from the present enquiry, rests upon the broad distinction between instruction and education, their difference must be rightly understood, and kept constantly in mind. Education may be said to consist of that moral, combined with intellectual, training, by which the mind is taught to discern, and the heart is led to feel, the great object for which man is created, and the duties which he is called upon to fulfil in this stage of his existence. Instruction, in its broadest and complete sense, is merely the intellectual training, by means of which the mind acquires the power of discerning and correctly appreciating things and persons, and the faculty of reasoning upon the facts observed. There is, also, a narrower meaning frequently ascribed to the term “instruction,” by which it is limited to an initiation in the arts of reading and writing, &c. It is obvious that in either of these senses instruction is insufficient of itself to repress criminal passions, which are not the result of any action of the mind, but spring from the secret impulses of the heart. It does not

* See vol. ii. p. 316.

pretend to such power, nor do its advocates lay claim to it on its behalf. This is the high attribute of education, of which instruction is merely a handmaid—an instrument, as it were, to prepare the mind for the reception of the seed which education is about to sow.

But further, instruction does not necessarily imply the inculcation of knowledge calculated to give a right direction to the energies of the mind. It may make a man learned, but not of necessity good; it may store the head with knowledge, and brace the mind for the greatest exertions; but may leave its possessor ignorant of the nature or of the value of virtue. It is true, that in general it is not applied to such purposes—it is seldom now that the improvement of the heart is not the professed aim of instruction; but it too frequently happens, that the means used fall short of the intended purpose, or even tend to false and dangerous consequences. For these reasons, it is a question how far the degree of instruction possessed by an individual may be taken as evidence of the amount of education which he has received. Applied to single cases it would certainly not hold good; for such instruction may have been imparted without any reference to religion, which is the only sound basis of education, or without the recommendation of a single virtue, the acquisition of which is the proper end of all education; while, on the other hand, moral discipline, the most precious fruit of education, may have been acquired by oral communication, without an acquaintance with the usual instruments of knowledge. But these cases are rare, more particularly the latter, and may therefore be treated as exceptions. On the one hand, elementary instruction is usually so applied as to inculcate moral doctrines; the books used commonly relate in some degree to religious subjects, and the sentiments prominently put forward and encouraged are usually of a nature to suggest virtuous principles, and to promote the cultivation of moral and useful habits. On the other hand, although virtuous principles are often inculcated by other instruments than reading and writing, they are seldom acquired without the assistance of those instruments, and no great progress can be made in the acquisition of those principles, before a desire is awakened to possess a knowledge of the means best adapted for their attainment and improvement. In dealing, therefore, with a large number of cases, in which the extremes on either side usually balance one another, it seems that the amount of instruction possessed by a multitude may, on the whole, be taken as evidence of the amount of moral education which they have received; not, indeed, as certain evidence, but as the best which can at present be obtained, and as an approximation generally worthy of credit.* It must also be taken into consideration, that whatever imperfection exists in the test affects all parts equally, and therefore it does not invalidate any

* The Reports of the Chaplains of the Lewes and Preston gaols, noticed on a former occasion (*Journal* vol. ii., p. 442), furnish remarkable testimony in support of this proposition. Out of 846 prisoners at Lewes, only 8 could read and write well; and these alone, out of the whole number, were acquainted with Christian Doctrine. 54 others were acquainted with the history of the Saviour; of these 49 could read well. Out of 541 who were either wholly ignorant, or could only read imperfectly, not more than 5 were acquainted with the history of the Saviour. At Preston, out of 270 offenders, 9 could read and write well; while 11 were well-instructed upon religious subjects.

comparison drawn between classes possessing different degrees of *instruction*. Having thus explained the real nature of the evidence afforded by the Criminal Tables, and the extent to which it may be employed in investigating the connexion between crime and ignorance, I shall proceed to the examination of the results of the tables.

The first year in which the degree of instruction was noted was 1835, but as the classification then adopted was changed in the following year, the results cannot be blended with those of the subsequent period. In that year the offenders were divided into three classes:—

- 1st. Those who could neither read nor write.
- 2nd. „ „ read only.
- 3rd. „ „ read and write.

In the following year four classes were distinguished, *viz.*—

- 1st. Those who could neither read nor write.
- 2nd. „ „ read and write imperfectly.
- 3rd. „ „ read and write well.
- 4th. „ „ who had received a superior degree of instruction.

The tables for the subsequent four years, from 1836 to 1839, have been framed upon this arrangement, and the results which I am about to bring forward, have been drawn from the whole, or from the greater part, of this period.

In each year there is a small proportion of the offenders whose instruction cannot be ascertained. It amounted, on the average of the last four years, to rather more than 2 per cent. ($2\frac{1}{3}$) of the total number of offenders, and the numbers of which it is composed have been altogether excluded from the following computations.

The first subject for enquiry is the proportion of individuals who compose each of the four classes above described. In calculating the proportions for each year separately, in order to ascertain the amount of variation in different years, I found, that in 1836, the number of offenders reported to possess a superior degree of instruction was so disproportionately great, compared with any of the subsequent years, being twice as great as in 1837, and three times as great as in either of the following years, that there appears strong ground for believing, that in this year the parties making the returns were not sufficiently versed in the method of the new classification, and included a considerable number among the well-instructed, whom, in subsequent years, they would have ranked in a lower class. For this reason I have excluded the year 1836 from some of the computations, and have taken the three years from 1837 to 1839, which appear to embrace a sufficiently long period, and an adequate number of cases, to afford a fair average. In these three years 69,517 persons, of both sexes, were committed for trial, or 23,172 annually. Of this annual average—

- 8,201 could neither read nor write.
- 12,567 „ read and write imperfectly.
- 2,318 „ read and write well.
- 86 had acquired a superior degree of instruction.

The per-centage proportions of these numbers are respectively as follows:—

- 35.4 could neither read nor write.
- 54.2 „ read and write imperfectly.
- 10.0 „ read and write well.
- .4 had acquired a superior degree of instruction.

The variations in the proportions during the three years were very small, not having exceeded $2\frac{1}{2}$ per cent. in any class; and the class of superior instruction having only decreased from 4 in 1,000 in 1837 to 3 in 1,000 in the two following years. In 1836 it was 9 in 1,000.

Thus, on the average of the triennial period, out of 100 persons charged with criminal offences, 35 were wholly destitute of instruction, not being able either to write or read; and 54 possessed the lowest degree of elementary instruction, being able to read and write imperfectly. It is not unfair to presume, that the whole of this latter class, whatever may have been the oral instruction, the exhortations, or the example of their parents—and how few in the class to which the majority of criminals belong ever possess such advantages!—had not received that amount of instruction which would be worthy of the title of education, or which, by the nature of the lessons conveyed, or by the direction given to the thoughts, could have had any permanent good influence upon their minds. These two classes, therefore, or nearly 90 in 100, may be placed together as persons wholly destitute of moral instruction, and almost destitute of the elementary knowledge by the aid of which it might be acquired. The third class had advanced a step further; they could read and write well; but it does not necessarily follow that they had received such an amount of intellectual instruction, or had attained such a degree of self-knowledge, as would serve to dispel the darkness of ignorance, and enable them to acquire a control over their thoughts and actions. Less than this falls short of education. Still the individuals composing this class stand in a far better position than those in the preceding two—they possess the key to knowledge; and it may be presumed, that the general direction of their studies had tended to inculcate lessons of moderation and virtue, and therefore this class cannot assert the plea of ignorance in extenuation of their criminality. They cannot, however, be called an educated class, nor can education be justly charged with inefficiency to restrain crime, because a number, however great, of half-educated persons figure in the tables of criminals. No system or institution can be taxed with incompetency, because it fails to produce its intended effect without a sufficient trial, or before it has had time to develop and apply its resources. There remains, therefore, only the fourth class, who have received an instruction beyond that afforded by mere elementary tuition, and of whom consequently it may be said, that education has failed to deter them from the commission of crime—and these amount to 86 in a year, or, proportionately, to 4 in 1,000.

It cannot surely be averred, that this number presents the same proportion which the well-educated classes bear to the whole community. It must be remembered, that scarcely any of the criminals included in these tables are under 10 years of age, and therefore in a comparison with the general population, the number under that age must be excluded. Will it then be said, that the proportion of 4 bears the same ratio to the total number of well-educated persons in this country above the age of 10, that 996 bears to the total number of ignorant and ill-instructed; or, applying these proportions to the existing population of England and Wales, that out of the 11,000,000 persons above the age of 10, only 44,000 are well educated, or possess that amount of educa-

tion which is sufficient to arm them against the impulses of passion and the allurements of vice?

Or will it be asserted, on the other hand, that the vices and crimes of the educated escape detection and punishment—that the fraudulent and vicious practices, in which the higher and better educated classes indulge, do not appear in the criminal courts, but become the subject of enquiry in the civil courts, or are glossed over to avoid the scandal of publicity? This argument does not hold good, because it is incontestably true, that a much larger amount of vice and criminality escapes detection in the lower classes of society than even exists among the upper classes. What proportion do the fraudulent agents, the dishonest bankrupts, the extortioners and cheats in the higher classes, bear to the professional thieves, the receivers of stolen goods, the impostors, and vagabonds who escape detection among the lower classes? Are not debauchery, intemperance, profaneness, and irreligion, those parents and associates of crime, more frequent and more gross among the lowest and most ignorant classes, than among the upper and better educated? Where shall we look among the higher classes in the metropolis for a body of habitual violators of the law, to compare with the 15,000 persons of depraved character registered within the district of the Metropolitan Police, as being known to depend for their subsistence upon acts of depredation and immorality?*

Neither of these arguments will hold good; it follows, therefore, upon the evidence of these tables, that the proportion of criminal offenders among the educated portions of society, is very much less than that which is found among the ill-instructed and ignorant. It may, however, be urged that education prevails chiefly among the rich, who have not the same temptations to criminality as the poor. This argument applies almost exclusively to one class of crimes, of which the desire of gain is the motive, and of which the poor may allege that distress or want are the immediate causes. But there is abundant evidence to prove that *want* is not the usual instigator to crime even among the poor. One numerical proof, and the evidence of one competent witness, will be sufficient, on the present occasion, to establish this point. Out of 1,000 prisoners confined in the gaol at Preston, Mr. Clay, the chaplain, ascertained from the individuals themselves, that only 76 were induced by *want* to commit the crimes for which they were imprisoned.† It might have been supposed that many would have been inclined to hide the true cause of their delinquencies, and to attribute them to poverty and distress; but the whole number who pleaded this excuse was 76 out of 1,000 cases. Mr. Clay shews, that intoxication—in itself a vice—is by far the most prevailing cause of crime, as 455 out of the 1,000 cases were immediately attributable to this single vice, and this is confirmed by the Inspector of Prisons for Scotland, whose wide experience adds great weight to his testimony, that “of all the immediate causes of crime and offences in Scotland, drunkenness is by far the most potent.” But there is this further reply, that the poor, whenever they acquire a good education, almost invariably rise above poverty, and that it is the want of education which disqualifies the great mass of the people from emerging from abject poverty, and keeps them in that state of wretchedness which

* First Report of the Constabulary Force Commissioners, p. 13.

† Journal of the Statistical Society of London, vol. i. p. 124.

debases their minds, destroys their sense of right and wrong, and drives them into acts of dishonesty and crime, for the purpose generally of gratifying their depraved desires. It is true, that “the poor shall never cease out of the land;” but poverty is not of necessity allied with depravity: many of the poorest communities and nations are the freest from vice, and it will be a subject well worthy of statistical investigation, to shew how in various nations vice and crime have progressed with the advance of wealth and luxury, where this material progress has not been accompanied with a corresponding advance in mental enlightenment and religious instruction.

The results exhibited by the English tables are confirmed by the experience of every country from which we have similar information; and it will be interesting to observe the partial differences, which may be supposed to mark the relative degree of instruction possessed by the general population of each. But previously to drawing this comparison, it may be well to shew that the returns do exhibit that degree of instruction, at least relatively in different districts, by adducing evidence that the offenders committed for trial are, for the greatest part, drawn from the neighbourhood of the court before which they are brought, and that a very small portion consists of the floating population. In rural districts, where the population is stationary, and there is not the same inducement to immigration as in the towns, it scarcely admits of a doubt, and all experience proves, that the majority of the offenders apprehended consists of residents. The rural districts do not afford the same opportunities or the same temptations to an itinerant criminal population as the towns, in which wealth is accumulated, and property of a portable and easily convertible nature is more exposed. But I shall be enabled to shew that in towns by far the greater proportion of crimes are committed by persons residing in them, or in the immediate neighbourhood. The Rev. Mr. Clay, whose reports have already been quoted, shews the previous residence of the prisoners committed to the gaol at Preston; and from his last two reports, it appears that of the whole number committed, 85 per cent. belonged to the immediate neighbourhood, and 8 per cent. more to the rest of the county, leaving only 7 per cent. as the whole of the floating criminal population committed to trial. In some towns which are great thoroughfares, as Liverpool, Bristol, Birmingham, Croydon, &c.; or places of fluctuating population, as Brighton, Bath, or Cheltenham, this proportion will be greater, but nevertheless on the average of town and country in different counties, it will not probably be much affected.

It has been shewn that in England and Wales out of 100 offenders—

Per Cent.

35·4 could neither read nor write.

54·2 „ read and write imperfectly.

10·0 „ read and write well.

·4 had received a superior degree of instruction.

In Scotland, out of 8,907 offenders who were tried in the three years from 1836 to 1838—

Per Cent.

20·2 could neither read nor write.

59·2 „ read and write imperfectly.

18·2 „ read and write well.

2·4 had received a superior degree of instruction.

Here, then, the proportion of the wholly uninstructed is nearly one-half of that which exists in England, and the proportion of the class who are able to read and write well is nearly double, while that of the educated is six times as great; proving that instruction is much more general, and is usually carried further, in Scotland than in England.

In Ireland, on the other hand, the proportions are reversed. Unfortunately the classification is different in that country, as the form which was at first introduced, and subsequently abandoned, in England, has been there adopted and maintained. Hence it is impossible to draw an exact comparison between Ireland and Scotland, or between the results of equal periods in Ireland and England; but in order to institute as close a comparison as possible, I will contrast the results of the triennial period from 1836 to 1838 in Ireland, with the single year 1835 in England, when the classification was the same in both countries.

In Ireland.	In England.	
Per Cent.	Per Cent.	
46·1	35·0	could neither read nor write.
21·1	21·4	„ read only.
32·8	43·6	„ read and write.

Thus while the class who could only read bore the same proportion in both countries, the other two classes were exactly reversed. One-third more could read and write in England than in Ireland, and one-third less were wholly uninstructed.

The only comparison which can be instituted with Scotland, is between the proportions of those who can neither read nor write; and the result is, that in Ireland 46·1 per cent., or nearly one half, belong to that class, while in Scotland the proportion is only 20·2 per cent., or one-fifth.

Before proceeding to examine the relative condition of other countries, it may be well to enquire how far these results agree with what is known respecting the state of instruction among the general population of this kingdom. It is to be regretted, that in the British Isles, no such test of public instruction exists as that provided in Norway by the law, which requires that every inhabitant shall possess a certain amount of instruction before he can be confirmed; and further enacts that he cannot enter into any trade, or possess the rights of a citizen, until he is confirmed. In the absence of any such test, the only information which exists, as to the amount of instruction possessed by any large number of persons in England, is that afforded by the tables under examination, which applies only to criminal offenders, and by the table contained in the Second Report of the Registrar-General of Births, Deaths and Marriages, which is just published, relative to the mode of signature used by persons contracting marriage. But this table refers to writing only. However, from this it appears that out of 141,083 couples who were married in the year ended 30th June, 1839, 41 per cent. signed with a mark, being unable to write their own names, or being so ill able to write, that through shame or nervousness they declined exposing their incapacity. I shall have occasion presently to shew the great difference which exists between the two sexes, as regards the degree of instruction prevailing among them respectively. The same fact is

shewn by the Registrar-General with regard to signatures of parties marrying; for while the average of the two sexes who subscribed with marks, was 41 per cent., that of males alone was 33 per cent., and of females alone 49 per cent. There can be no doubt that a considerable portion of these are able to read, at least well enough to entitle them to be placed in the class of those who can read or write imperfectly. If, therefore, one-third be abstracted from the above proportion on this account, there will remain 22 per cent., or say 25 per cent. or one-quarter, of the adult male population who can neither read nor write. But the proportion of male criminals (excluding the females in order to render the comparison equal) who can neither read nor write is 34·4 per cent, or one-half greater than the above proportion, which is another proof that ignorance prevails to more than the average extent among criminals. Some allowance, however, must be made for the number of juvenile offenders who swell the list of criminals, and among whom a relatively greater proportion of the wholly uneducated may be expected to be found, than among the older offenders; but this difference will not much affect the average, as the proportion of juvenile offenders to the whole number is comparatively small, and some returns to which I shall presently call attention, with the reports upon the Parkhurst Reformatory for juvenile offenders, shew that the proportion of wholly uneducated persons is not so widely different among those under and above 17 years of age, as to have much influence on the above proportion.

There exists, also, some other evidence with regard to the prevalent amount of instruction, which, although not of so extensive a nature, is worthy of notice in this place. Enquiries have been made by various Statistical Societies and other bodies, into the state of instruction prevailing among the adult portion of the working classes in various parts of the country. These enquiries having been confined exclusively to the lower classes, the results must of course fall greatly below the average of the population. On the other hand, as the information depends upon the authority of the parties examined, there may have been a tendency on the part of some to pretend to a knowledge which they did not actually possess, although the agents employed state that in general they had no reason to doubt the truth of the statements which they received. At all events the amount of this exaggeration can by no means equal the deficiency caused by the total exclusion of the higher and middling classes. The following are some of the principal results.

In Manchester and Salford,* out of 169,223 persons of all ages—

87,185, or 51·5 per cent.	could neither read nor write.
82,038 ,, 48·5	,, read and write.

And if the children under 10 years of age, who amount to one-fourth of the population, be excluded, 21 per cent. could neither read nor write.

In Bury,* out of 14,322 persons of all ages—

5,834, or 40·7 per cent.	could neither read nor write.
4,579 ,, 32·0	,, read only.
3,909 ,, 27·3	,, read and write.

And if the children under 10 years of age be deducted, 15·7 per cent. could neither read nor write.

* Separate Reports of the Statistical Society of Manchester.

In Dukinfield, Staly Bridge, and Ashton,* out of 41,882 persons of all ages—

19,661,	or 46·9	per cent. could neither read nor write.
10,634	,, 25·4	,, read only.
11,587	,, 27·7	,, read and write.

Of those above 10 years of age, 21·9 per cent. could neither read nor write.

In Bristol,† out of nearly 10,000 (9,861) adults—

2,216,	or 22·5	per cent. could neither read nor write.
2,523	,, 25·6	,, read only.
5,122	,, 51·9	,, read and write.

In Pendleton,‡ out of 4,743 adults—

906,	or 19·1	per cent. could neither read nor write.
1,826	,, 38·5	,, read only.
2,011	,, 42·4	,, read and write.
1,309	,, 28·	,, cipher.

In the same‡ place, out of 1,479 youths from 10 to 21—

460,	or 27·	per cent. could not read nor write, or could barely read
551	,, 37·3	,, read only.
528	,, 35·7	,, read and write.

In two small parishes in Rutlandshire§ containing 483 adults—

Only 33,	or 8	per cent. could neither read nor write.
151	,, 31	,, read only.
294	,, 61	,, read and write.

In a wretched part of the parish of Marylebone,|| in London, out of 1,044 adults—

25	per cent. could neither read nor write.
75	,, read, or read and write.

In two other portions of the same parish, inhabited principally by Irish labourers and their families, out of 1,244 adults¶—

49	per cent. could neither read nor write.
41	,, read, or read and write.

Among 1,022 able-bodied and temporarily disabled paupers, above the age of 16, the inmates of several Union workhouses in Norfolk, Suffolk, and Kent, whose attainments were ascertained with precision **—

46·5	per cent. could neither read nor write.
15·	,, read imperfectly.
30·2	,, read decently.
5·3	,, read in a superior manner.
66·4	,, not write.
15·4	,, write imperfectly.
16·9	,, write decently.
1·3	,, write well.

From these statements, which are all that I have been able to procure,††

* Separate Report of the Statistical Society of Manchester.

† Journal of the Statistical Society of London, vol. ii. p. 372.

‡ Ibid., vol. ii. p. 80.

§ Ibid., vol. ii. p. 302.

|| First publication of the Central Society of Education, p. 340.

¶ Athenæum, 1837, No. 498, and MSS.

** Second publication of the Central Society of Education, p. 262.

†† In the Supplementary Report of the Factories Inquiry Commission, (p. 42) printed by the House of Commons in 1834, there is a statement of the amount of instruction possessed by a large body of operatives in the factories of the United Kingdom; but as a considerable proportion of that class consists of children, the results cannot be used in the present comparison, which refers only to adults.

it will be seen that, with the exception of the two last cases, which do not fairly enter into the comparison—as in one, the parties were paupers, and may therefore be supposed to be below the average of the labouring classes, and a large proportion of them were, moreover, disabled, while in the other they were chiefly Irish immigrants—the results generally confirm the evidence afforded by the Table of signatures in the Registrar-General's Report, *viz.*, that about one-third of the adult male population of England cannot write even their names, and that from one-fifth to one-fourth cannot write or read, even in the most imperfect manner.

There is, however, no means of ascertaining what is the proportion of those who, although able to sign their names more or less legibly, and to read, or rather to spell through a dozen lines in as many minutes, have not advanced beyond the most limited stage of instruction, and are wholly unable to derive either pleasure or profit from their acquirements; but it is greatly to be feared that it is very much larger than that of the wholly ignorant class, and this, after all, is the question as regards education—not whether a man by dint of spelling letter by letter, can make out the direction on a sign-post or the address of a letter, or that he shall be able to sign a receipt for his wages, or register the birth of his child—but whether he has sufficient instruction to enable him to understand what he reads—to allow scope to the imagination and the memory while he reads—and to apply the information obtained by study to the practical purpose of self-improvement.

The Chaplain of the Parkhurst Reformatory furnishes some valuable evidence upon this point, in his last Report.* He shews that out of 157 prisoners, 85 could read more or less perfectly, but only 58 had any useful knowledge of meanings, and 42 any information from general meaning. The following is the statement which he gives of the mental state of those offenders:—

Digest of Acquirements.		Knowledge of Meanings.		Information from General Reading.		Knowledge of Scripture.	
Read well . . .	5	Some	24	Some	25	Considerable. .	14
„ tolerably . .	26	A little . . .	34	A little . . .	17	Some	25
„ imperfectly .	54	Very little . .	19	None	90	A little	25
„ scarcely at all	34	Scarcely any or	80	Forgotten . .	25	Scarcely any or	93
„ not at all . .	38	none }				none }	
Total . . .	157	Total . . .	157	Total . . .	157	Total . . .	157

He remarks that “very few, perhaps not more than 12 or 13 in all, sufficiently understood what they read to render the operation easy and pleasant to themselves. The mind appeared so much absorbed in the mechanical process of recognising signs and uttering sounds, as to be unequal to the intellectual efforts necessary for considering *the sense*. The subject may thus, therefore, be summed up:—Of those that have attended day-schools for more than a year together, not half can enter into the meaning of the words they use.” The same holds good with regard to adults. Mere reading then is not enough. The ability to read is useful for many purposes of life, and as such, is the first important step in instruction; but if carried no further, it can produce no

* Presented to Parliament, Sess. 1840, p. 23.

effect either upon the mind or heart, nor possess a much higher value than any art by which a man can earn his livelihood. The threshold of education is the power to read with ease; the first step on crossing it is the power of understanding and applying what has been read.

With respect to Scotland and Ireland, I do not know of any similar information by which the prevalent degree of instruction can be ascertained. The returns from the factories alluded to in a preceding note, indicate a much higher degree of instruction in Scotland than in England; as in the former country, out of 29,486 operatives, 95·8 per cent. could read, and 53 per cent. could write, while in the latter, out of 50,497 operatives, only 86 per cent. could read, and 43 per cent. could write. The numbers for Ireland are too small to admit of any conclusive inference. I therefore turn to France, in which country a very satisfactory means of comparison with the general population exists, through the annual Conscription, which embraces a large number of youths above the age of 18, taken from all classes throughout the kingdom. These are subject to an examination as to their scholastic attainments; and in 1836 it was found that 50·5 per cent., or exactly one-half, could neither read nor write. This is a very much larger proportion than in England, where only 33 per cent. were unable to write, and about 25 per cent. could not read; but it is considerably smaller than it was a few years ago in France, for in the three years from 1827 to 1829, 62 per cent. of the conscripts were unable to read and write.* From this it would appear that a great impulse has lately been given to national instruction in France. With regard to the criminal population of that country, it appears, from the result of 7 years, ending with 1834, in which 50,338 persons were brought before the tribunals,† that—

Per Cent.

60·3 could neither read nor write.

27·7 ,, read and write imperfectly.

9·8 ,, ,, well.

2·2 possessed superior instruction.

The contrast with England is remarkable, and will be the more striking when the fact which I noticed last year is taken into consideration, that less than 2 per cent. of the offenders in France are under 16 years of age, among whom instruction is below the average, while in England 12 per cent. are under that age.‡ In France 60 criminals out of 100, and in England 35 out of 100, could neither read nor write; in France 28, and in England 54, out of 100 could read and write imperfectly, shewing nearly double the proportion of total ignorance in France, and double the proportion of partial instruction in England. In the third class, in which the parties could read and write well, the proportion was nearly equal in both countries; but the proportion of well educated offenders was nearly four times as great in France as in England. This excess of the educated class in France may arise from a considerable number of political offenders of a superior grade of life, appearing before the courts in that country; while in England such offences are almost unknown, or are confined to persons of an inferior and ignorant class.

* Journal, vol. ii. p. 189.

† First publication of the Central Society of Education. p. 329.

‡ Journal, vol. ii. p. 330.

In Belgium the state of instruction corresponds in a very remarkable manner with that which is found to exist in France, which correspondence, as the circumstances of the two countries and the condition of the population are so similar, affords a strong proof of the correctness of the evidence. Among 36,422 criminal offenders brought before the courts in the five years from 1828 to 1832*—

Per Cent.

60·8 could neither read nor write.

27·1 „ read and write imperfectly.

10·0 „ read and write well.

2·1 had received a superior degree of instruction.

The proportions do not differ more than one-half per cent. in any class from those of France. In Belgium the annual enrolment of the militia offers the same means of ascertaining the state of general education which the conscription affords in France. The result shews that among young men arrived at the age of 18, when they become liable to serve in the militia, the instruction is even below that which prevails among the French conscripts. Of the latter 50·5 per cent. could neither read nor write; of the former 53 per cent. were ignorant to the same degree.†

Thus it is shewn that in England, France, and Belgium, the only countries from which we possess returns enabling us to compare the relative extent of instruction among the criminal offenders and the general population, in all of these, there is an excessive proportion of wholly ignorant persons among the criminal classes.

Very little information exists as to the comparative amount of instruction prevailing among criminals at different ages. There is, however, a table in the Report of the Inspectors of Prisons in England, presented to Parliament last year,‡ in which juvenile offenders under 17 years are distinguished from those above that age. The results as regards males, which I have taken separately for the purpose of a more exact comparison with the previous results, are as follows. Out of 100 criminals imprisoned in England and Wales, including those under summary conviction, in the year 1839—

Under 17.	Above 17.
Per Cent.	Per Cent.
48·3	35·5 could neither read nor write.
21·4	19·2 „ read only.
27·0	37·5 „ read, or write, or both.
3·3	7·8 „ read and write well.

* Statistique comparée de la Criminalité en France, en Belgique, &c. Par Ed. Dupeptiaux, p. 17.

† In the arrondissement of Brussels, the proportion was a little more favourable; but it is generally found that in large towns the standard of instruction is above the average, as will shortly be noticed. In this district, out of 4,161 young men who had attained the age of 18,—

2,113, or 51 per cent.	could neither read nor write.
291 „ 7	„ read only.
819 „ 20	„ read and write.
908 „ 22	„ read, write, and cipher.

Journal, vol. ii. p. 389.

‡ Fourth Report (1839) of Inspectors of Prisons.—Home District, p. 126a.

The difference is very considerable, and tends to throw a still darker hue upon that fearful picture of ignorance exhibited by the educational statistics of the juvenile delinquents with whom our gaols are crowded.

I will now proceed to exhibit some very interesting results, which are obtained from a comparison of the difference existing in the degree of instruction possessed by male and female criminals respectively. In England the proportion of females who—

	Per Cent.		Per Cent.
Could neither read nor write	was 39·8,	while that of males was	34·4
„ read and write imperfectly	„ 55·0	„ „	54·1
„ read and write well . .	„ 5·1	„ „	11·1
Had received superior instruction	„ ·1	„ „	·4

Which shows that the proportion of instructed criminals brought before the courts is twice as great among males as among females, and the proportion of educated males is four times as great.

But this difference is very much greater in Scotland and Ireland. In Scotland the proportions are as follows :—

	Males.	Females.
Could neither read nor write . .	17·1	29·3
„ read and write imperfectly	58·	63·1
„ read and write well . .	21·8	7·3
Had received superior instruction	3·1	·3

Here the proportion of the instructed among the males is 3 times as great as among the females, and the proportion of educated among the males is 10 times as great as among the other sex.

In Ireland the proportion of those who—

	Per Cent.	Per Cent.
Could neither read nor write was, among the males	41·6	females 62·
„ read only	„ 20·4	„ 23·9
„ read and write well	„ 35·8	„ 14·1

Here also the proportion of instruction among the males is 3 times as great as among the females.

If, therefore, it be admitted that the extent of instruction found to exist among criminals is at all indicative of that which prevails among the general population, it follows that although the proportion of instructed persons of both sexes is greater in Scotland than in England or Ireland, as has been before shewn, yet the instruction of females compared with that of males is comparatively less in Scotland and in Ireland than in England.

In seeking for an explanation of this remarkable difference, one important cause may be found in the unequal proportions of male and female children who attend school in the three countries. According to the Returns collected by the London and Manchester Statistical Societies, which embrace 157,652 children, the proportion of the sexes at school was nearly equal,—there were 93 girls to 100 boys; and among the children in the schools of the National Society in England, including daily and Sunday scholars, there were 89 girls to 100 boys.* But in Scotland, according to the Returns made by the ministers of parishes in the year 1834,† there were only 68 girls to 100 boys; and in

* Society's Report for 1837, p. 135

† Tables of the Revenue, Population, and Commerce, part 6, p. 177.

Ireland, according to the Returns made by the Commissioners of National Education in that country, there were (in 1839) 72 girls to 100 boys.*

From these facts, combined with a comparison between the number of male and female offenders brought to trial in the three countries, another important proof in support of the value of education may be gathered; for it appears that the proportion which the female bear to the male criminals in the three countries—the population of the two sexes remaining always nearly equal,—is exactly in the inverse ratio to the proportion of females at school. In Scotland, where the number at school is the lowest, the proportion of female criminals, compared in the manner I have described, is the greatest, *viz.*, 23·7 in 100, while in Ireland it is 21·5 in 100; and in England and Wales, where the number at school is the highest, the proportion is only 17·2 in 100. There can be no reason for believing that any material difference in the amount of domestic instruction imparted to female children exists in the three countries, and still less for supposing, that in any of the three it exists to an extent worthy of notice among the class to which the majority of criminal offenders belong.

The attention of the Statistical Section at Glasgow was called to the fact exhibited in Captain Miller's paper, read on the first day of that meeting, that the proportion of females apprehended for simple larceny, or petty thefts in Glasgow, was one-half greater than in London or Dublin. This confirms the results which have been above stated.

Before turning to another branch of the enquiry, may we venture to express a hope that the publication of these unexpected results may be the means of calling attention to the subject, and may lead to efforts to verify the truth, and to discover the causes, of the phenomenon. If it be found true, let not Scotland, which has so long boasted of the superior instruction and moral condition of her children, leave the fairest portion of them, the humanisers of the whole, under this disadvantage. It has been shewn that instruction is much more general in Scotland than in England; there can be no reason, in the condition of society in that country, why the female sex should not participate in that advantage to the fullest extent.

The next point for enquiry is the nature of the offences of which the small number of educated persons committed for trial in England and Wales were accused. It will perhaps be most simple and satisfactory to give the actual numbers, and to shew in detail the offences with which they were charged. For this purpose I have thrown together the three years from 1837 to 1839, in order to exclude the year 1836, in which, as I have before stated, the returns appear defective. I have also used the more systematic classification of offences suggested by Mr. Symonds, and adopted in my paper of last year, as I find it impossible to exhibit the spirit and real character of the offences by the method of grouping practised in the official tables. In these three years, therefore, 258 out of 69,517 persons committed for trial in England and Wales, possessed a superior degree of instruction. The

* Annual Report, 1840.

returns do not afford the means of ascertaining the results of their trials, but it may be supposed that the same proportion was condemned as of the other offenders; or that, if there were an excess of acquittals in this class, it would be owing rather to the skill of the counsel who might be engaged by a better class of offenders, or to merely fortuitous circumstances; as there is no reason to believe that educated persons are more liable to wanton and unwarrantable charges than the ill-instructed or wholly ignorant.

Of these 258, 246 were males and 12 were females, being 1 of the latter to 20 $\frac{1}{2}$ of the former, while upon the average of all females it is 1 to 5; shewing that education has a more powerful influence in preventing females from committing crime than it possesses among males.

Of the 12 females committed—

8	were charged with larceny, one being a servant.
2	„ frauds.
1	„ murder.
1	„ wounding with intent to injure the party.

Of the 246 males committed, 110 were charged with acts of theft of various kinds perpetrated without force, *viz.*—

56	with simple larceny.
25	„ embezzlement.
12	„ theft, being in service.
4	„ horse-stealing.
3	„ stealing from the person.
2	„ stealing letters, by servants of the post-office.
2	„ „ fixtures.
2	„ sheep-stealing.
1	„ poaching for fish.
1	„ stealing in a dwelling-house.
2	„ receiving stolen goods.

45 were charged with malicious offences against the persons of individuals, *viz.*—

22	with assaults.
15	„ manslaughter.
7	„ attempts to maim and injure.
1	„ murder.

33 were charged with attempts at theft by fraud, *viz.*—

19	with forgery of deeds and papers.
14	„ frauds.

21 were charged with offences against the public peace, or the laws of the state, *viz.*—

17	with riots.
2	„ assaults upon officers of the state.
2	„ perjury.

20 were charged with sexual offences, *viz.*—

10	with rape.
4	„ bigamy.
2	„ attempts to procure miscarriage of women.
1	„ an unnatural crime.
1	„ concealing birth of infants.
1	„ exposing the person indecently.
1	„ keeping a disorderly house.

4 were charged with theft by force, *viz.*—

- 2 with housebreaking.
- 1 „ breaking into a shop.
- 1 „ assault with intent to rob.

3 were charged with malicious offences against property, *viz.*—

- 1 with arson.
- 1 „ sending threatening letters.
- 1 „ killing and maiming cattle.

And 10 were charged with other offences not enumerated.

The proportions of these several classes of crime are widely different from those which prevail among criminals of all descriptions, as shewn in my paper already reverted to (vol. ii. pp. 324-5.) The per-centage proportion of well-educated persons charged with—

	Per Cent.		Per Cent.
Theft, without violence.	was 44·3	the average of all criminals was	75·1
Malicious offences against persons „	18·3	„ „	5·3
Frauds and Forgery.	13·4	„ „	2·2
Offences against the state, chiefly } riots }	8·5	„ „	6·8
Sexual offences	8·1	„ „	2·4
Theft, with violence	1·6	„ „	7·1
Malicious offences against property „	1·2	„ „	0·6

Thus, it appears that the offences which preponderate among the class of instructed criminals are, malicious offences against persons and property, frauds and forgery, rioting and sexual offences. The offences which, although the most numerous, are proportionately the least prevalent, are thefts without violence. Thefts with violence are also rare, and greatly below the average.

These results are borne out by an examination of the offences with which the next instructed class—of those, namely, who can read and write well,—are charged. This class seems to give evidence, by the nature of their offences, of being in a stage of transition between the ignorant and instructed classes. The differences in the proportion of the several classes of crime remain on the same side as among the educated criminals, but the amount of difference is in every case much smaller. Thus, the proportion of—

	Per Cent.	
Theft, without violence.	was 69·	{ which is nearly equal to the average ratio, while in the educated class the proportion was somewhat more than half of the average.
Malicious offences against persons . „	8·2	{ which is one-half more than the average, but less than one half of the ratio among the educated.
Frauds	6·2	{ which is three times greater than the average, and only one-half of the ratio among the educated.
Offences against the state	4·7	
Sexual offences	3·6	{ which is one-half greater than the average, but less than one-half of the ratio among the educated.
Theft with violence	3·8	{ which is one-half of the average, while in the educated class it was only one-fourth.
Malicious offences against property . „	0·5	

These results are such as might be expected. Education has less power to restrain the sudden outbreaks of passion, such as anger and lust, than it has to prevent the commission of crimes arising from pre-meditation, and from vices which are the result of the gradual growth of evil desires unrepressed, such as cupidity, &c. On the other hand, forgery, and offences requiring for their execution some degree of intelligence and powers of mental combination, are necessarily peculiar to the instructed classes.

There remains one other point of much interest upon which the criminal tables furnish information, *viz.*, the relative degree of instruction possessed by criminals in the several counties. If it be admitted that the instruction which prevails among criminals is on the whole indicative of that which exists among the general population, and if it has been sufficiently proved that the greater proportion of the criminals belong to the neighbourhood of the place, or at least to the county in which they are tried, it follows that the returns will afford a criterion of the comparative extent of instruction in the different counties. It has been shewn that at Preston only 7 per cent. of the persons committed for trial were strangers to the county. But even if this proportion were generally larger, as it certainly would be in places of great resort or thoroughfare, it is highly probable that the trampers, who form a considerable part of this section, being a more ingenious and enterprising class, of which evidence is given in the First Report of the Constabulary Force Commissioners, would not be below the average in point of instruction. If, however, they be below the average, they are not sufficient in number to affect the large proportion of uninstructed criminals; and, if above, they may raise, but cannot lower the character of the county.

It must be acknowledged that this evidence must be received with caution, and requires corroboration before any positive inferences can be derived from it. I have endeavoured to compare it with the results drawn from the registers of marriages already referred to, and in some respects there is a sufficiently marked coincidence, but not so strong as to warrant implicit confidence in either document as a certain criterion of the state of instruction in the different parts of the country. Nevertheless the comparison must be considered interesting, and when combined with other evidence of the same nature, may lead to significant results. In the first place I shall compare the counties separately, arranging them in two columns, commencing with the extremes of the most and least instructed, and placing in juxta-position with them the proportion of persons who, according to the Report of the Registrar-General, were unable to sign their names in each. The average of the uninstructed criminals in England and Wales was 89·3 per cent., and the average of persons who signed with a mark was 41 per cent.

From this table it appears that Rutland stands very high according to both accounts, which is further confirmed by the report of the Manchester Statistical Society, from which it appears that the proportion of children at school in the whole county is much higher than in most of the towns which its agent had previously examined, and that in two parishes the proportion of uninstructed adults is unusually small.* If

* Journal, vol. ii. pp. 297-303.

ABOVE THE AVERAGE.				BELOW THE AVERAGE.			
Counties.	Proportion of Criminals		Proportion of Persons who signed with a Mark.	Counties.	Proportion of Criminals		Proportion of Persons who signed with a Mark.
	In-structed.	Un-instructed.			In-structed.	Un-instructed.	
Rutland. . .	39.	61.	33.	Bedford . .	2.2	97.8	60.
Leiceste . .	22.6	77.4	43.	Durham . .	2.2	97.8	37.
Sussex . . .	20.3	79.7	37.	Derby . . .	2.6	97.4	41.
Cumberland .	19.	81.	24.	Worcester .	3.5	96.5	55.
Norfolk . .	16.8	83.2	46.	Cornwall . .	4.2	95.8	43.
Westmoreland	16.7	83.3	27.	Essex . . .	4.6	95.4	50.
Middlesex . .	16.6	83.4	..	Kent	4.7	95.3	34.
Stafford . .	15.1	84.9	53.	Shropshire .	5.3	94.7	49.
Surrey . . .	13.9	86.1	34.	York	6.2	93.8	41.
Somerset . .	13.7	86.3	42.	Bucks . . .	6.3	93.7	48.
Suffolk . . .	13.4	86.6	49.	Lancaster . .	6.4	93.6	54.
Hereford . .	13.3	86.7	40.	Berks . . .	6.8	93.2	44.
Devon . . .	12.8	87.2	33.	Warwick . .	6.9	93.1	41.
Glamorgan . .	12.4	87.6	58.	Dorset . . .	7.	93.	30.
Northumber-land . . }	12.1	87.9	29.	Northampton	7.4	92.6	44.
Cambridge . .	11.2	88.8	47.	Monmouth . .	7.5	92.5	61.
Gloucester . .	10.8	89.2	38.	Oxford . . .	8.2	91.8	39.
AT THE AVERAGE.				Chester . . .	8.4	91.6	48.
Lincoln . . .	10.7	89.3	38.	Wilts	8.8	91.2	50.
Hants . . .	10.7	89.3	34.	Wales . . .	9.3	90.7	59.
				Hertford . .	10.1	89.9	55.
				Nottingham .	10.2	89.8	44.
				Huntingdon .	10.6	89.4	51.

it were not for this threefold evidence, some doubt might attach to the single result of the criminal tables, as the number of offenders was small. With regard to Leicester, I am unable to offer any explanation of its favourable position. That of Sussex I conceive to be partly owing to an excess of instructed persons apprehended in Brighton. Both accounts establish a superior degree of instruction in Cumberland and Westmoreland. In Norfolk and Suffolk the evidence is contradictory. In Middlesex the means of comparison do not exist, as the returns of the Registrar-General exhibit the metropolis separate from the county. On the other hand, the principal agricultural counties, particularly those in the south-east of England, Bedford, Berks, Bucks, Essex, Kent, and Oxford, are shewn to be below the average, as are also the two great manufacturing counties of Lancashire and Cheshire. The three mining counties of Durham, Derby, and Cornwall, likewise exhibit a marked deficiency of instructed criminals; they are, however, about the average as regards signatures on marriage. But in what terms shall we mention the fact shewn by this table, that in 3 counties in England only 2 in 100 criminals could read and write well, and that in 7 less than 5 in 100 were so far instructed. The number of criminals in these counties was 8,141; of whom 326, or only 4 in 100, could read and write well.

In the following table the counties are thrown together into the groups adopted by the Registrar-General, which are distributed according to locality; but it must be confessed that the comparison yields few

results, as the two criterions as often contradict as support one another. It confirms, however, the inferences previously noticed.

	Per-centage Proportion			Per-centage Proportion	
	Of Uninstructed Criminals,	Of Persons Significantly with Marks,		Of Uninstructed Criminals,	Of Persons Significantly with Marks,
Average of England and Wales	89.3	41.	6. <i>Western Counties.</i>		
1. <i>Metropolis</i>	90.6	18.	Gloucester	89.2	38.
2. <i>South-eastern Counties.</i>			Hereford	86.7	40.
Surrey	86.1	34.	Shropshire	94.7	49.
Kent	95.3	34.	Worcester	96.5	55.
Sussex	79.7	37.	Stafford	84.9	53.
Hampshire	89.3	34.	Warwick	94.1	41.
Berks	93.2	44.	Total	91.	47.
Total	89.4	36.	7. <i>North Midland Counties.</i>		
3. <i>South Midland Counties.</i>			Leicester	77.4	43.
Middlesex	83.4	36.	Rutland	61.	33.
Hertford	89.9	55.	Lincoln	89.3	38.
Bucks	93.7	48.	Nottingham	89.8	44.
Oxford	91.8	39.	Derby	97.4	41.
Northampton	92.6	44.	Total	83.	41.
Huntingdon	89.4	51.	8. <i>North-western Counties.</i>		
Bedford	97.8	60.	Cheshire	93.6	48.
Cambridge	88.8	49.	Lancashire	91.6	54.
Total	90.9	48.	Total	92.6	51.
4. <i>Eastern Counties.</i>			9. <i>Yorkshire</i>	93.8	41.
Essex	95.4	50.	10. <i>Northern Counties.</i>		
Norfolk	86.6	49.	Durham	97.8	37.
Suffolk	83.2	46.	Northumberland	87.9	29.
Total	88.4	48.	Cumberland	81.	24.
5. <i>South western Counties.</i>			Westmoreland	82.3	27.
Wilts	91.2	50.	Total	87.5	31.
Dorset	93.	30.	11. <i>Monmouthshire and Wales.</i>		
Devon	87.2	33.	Monmouth	92.5	61.
Cornwall	95.8	43.	Wales	90.7	59.
Somerset	86.3	42.	Total	91.6	60.
Total	90.7	39.			

The great discrepancy observable in the results for Middlesex and the metropolitan counties may, perhaps, be owing to an excessive proportion of marriages among the higher and middling classes being solemnized in these localities, and partly, it is to be feared, to a diminished proportion of marriages among the lower classes, owing to the facilities for their living together unmarried, without notice and without reproach, in the crowded and neglected alleys of the metropolis and its suburbs. Of the other districts, there appear to be only two in

which the results are so uniform as to merit much reliance, *viz.*, the superior instruction of the four northern counties, and the inferiority of Lancashire and Cheshire.

A comparison of the counties classed according to the prevailing employment of their inhabitants, affords some interesting results, and as the two statements in some measure agree, it will be the more valuable.

			Criminals Uninstructed.	Sign with a Mark.
In the 11 Agricultural counties in the east and south-east			88.9	47.1
6 ,, ,, south and south west			87.3	37.6
5 ,, ,, ,,			87.4	35.
Average . . .			88.1	42.
6 Manufacturing counties in the north . . .			90.7	47.1
4 ,, ,, south-west . . .			92.1	48.7
Average . . .			91.1	47.8
4 Metropolitan counties			87.1	34.4
Average of the United Kingdom . . .			89.3	41.

From this it appears that, by both accounts, the agricultural counties are on an average more advanced than the manufacturing; but that there is a great difference between the agricultural counties in the east and south-east of England, and those in the south and south-west, the former having very slightly the advantage of the manufacturing counties. As this result is contrary to the prevailing opinion upon the subject, it would be most desirable to obtain some further information which might throw light upon its correctness. That it does not hold good in the factories, and is not, in all probability, occasioned by the factory system, is placed almost beyond a doubt by the returns of the state of instruction among the operatives in factories, alluded to at p. 341, from which it would appear that the state of that class, as regards instruction, is unusually favourable. If returns similar to those prepared by Mr. Clay for Preston were published for the whole of the kingdom, we should be enabled to ascertain whether, and to what degree, an excess of Irish criminals in the manufacturing counties contributes to this result. I cannot here forbear calling attention to the great service which Mr. Clay's reports have rendered me in this investigation. Had I possessed similar information upon a more extensive scale, more than one point, which at present remains doubtful for want of sufficient evidence, would have been decided; and other inferences, which I have not attempted to draw on account of that insufficiency of evidence, might have been brought forward and discussed.

The returns of the London and Dublin Metropolitan Police Forces afford some insight into the state of those towns and their suburbs, compared with the whole country. The results are, that in both instances the proportion of instructed persons apprehended is greater in those towns than in the counties in which they are respectively situated; but if the cases of drunkenness and disorderly characters be separated, the proportions among the remainder exhibit very little difference. As the classification of the criminals with respect to instruction is the same in

Dublin as in London, there are the means of a perfect comparison between those two places, which is exhibited in the following statement of the persons tried and convicted in each :—

	London.	Dublin.
Could neither read nor write	41·3 } 90·6	62·5 } 95·1
„ read and write imperfectly.	49·3 }	32·6 }
„ read and write well.	8·4 }	4·5 }
Had acquired a superior degree of instruction	1· }	4·4 }

The comparison is very striking in favour of London. It is found, as might be expected, that the proportion of educated persons among those apprehended for drunkenness is comparatively great. In London the two better classes amounted to 14·7 per cent., and in Dublin to 9·4 per cent.

There is one class of offenders whose miserable mental condition is strongly depicted in these returns, *viz.*, disorderly prostitutes. It differs little in the two capitals. In London only 3, and in Dublin 2·1 in 100 could read and write well; in London only 1, and in Dublin 2 in 1,000 had received a superior degree of instruction. In London 54·1, and in Dublin 74·5 in 100 could neither read nor write; and it is from such as these, bred up in the darkest ignorance, debased by the vilest associations, and exposed to the most bitter trials and temptations, that the law expects and claims orderly habits and decent conduct. Vain hope! Worse than vain,—most short-sighted, legislation, which only provides punishment for the matured offender, without employing any vigorous measures to strike at the root of the evil, and to prevent the growth of the offence.

The examination of the Scotch and Irish counties must be deferred to a future occasion. Before concluding, I will briefly recapitulate the principal results which have been ascertained by the foregoing enquiry.

1st. That only 10·4 in 100 of the criminal offenders committed for trial in England and Wales are able to read and write well, and of these only 4 in 1,000 have received such an amount of instruction as may be entitled to the name of education; and that these proportions are greatly below the average standard of instruction among the general population.

2nd. That these proportions are considerably higher in Scotland, and lower in Ireland; and the evidence appears to establish that the degree of instruction possessed by criminal offenders is an indication of that possessed by the general population in the same districts.

3rd. That about one-third of the adult male population of England cannot sign their own names, and that from one fifth to one-fourth can neither read nor write.

4th. That these proportions are much more favourable than in France or Belgium, where one-half of the youths at the age of 18 could neither read nor write. The proportion of wholly ignorant criminals in those countries is correspondingly greater than in England.

5th. That in England, instruction is twice as prevalent among male as among female criminals, and one-half more prevalent among males in the general population than among females. That in Scotland and Ireland it is three times as prevalent among the male criminals.

6th. That this unfavourable condition of females in these two countries is further confirmed by the fact that the proportion of female to male criminals is greater than in England, and it may be traced to the circum-

stance of the number of girls at school in those two countries being very small in comparison with the number at school in England. In comparing the three countries, the number of female criminals is found to be exactly in the inverse ratio to the proportion of females at school.

7th. That education has a greater influence among females than among males in restraining them from the commission of crime.

8th. That instruction prevails, upon an average, to a greater extent among the agricultural than among the manufacturing counties of England, but that the agricultural counties in the east, east-midland, and south-east, are greatly below the average.

In the above statements I have confined myself to an investigation of the facts exhibited by the tables under examination. The results I leave to others to apply to the great practical questions connected with this subject, which are agitating the public mind. But I cannot refrain from calling attention to the fact that the evidence adduced most positively refutes the assertion, that education either promotes, or fails to check, the commission of crime. With regard to the re-training influence of instruction the effect is not quite so certain; but it is shewn that the proportion of criminal offenders who were merely instructed was only 1 in 10 out of the whole number. If, however, instruction be insufficient to restrain persons from vice and crime, ignorance is still more inefficient for that purpose. Instruction becomes more and more competent as it is improved. Education, although not always successful, as no human method ever can be, is the most perfect instrument for the attainment of this object. Let those, then, who object to instruction, improve the methods in use, and supply education in its stead; substitute, in fact, the reality for the shadow. Two other objections which have been urged against popular instruction are also overthrown by the above evidence. Whether it be true, or not, that the number of criminal offenders has increased in this and other countries, contemporaneously with the establishment of schools and the extension of the means of instruction—and whether it be true or false, that the proportion of criminal offenders is greatest in districts where instruction is most prevalent—no inference unfavourable to education can be drawn from the affirmation of either proposition, as it has been shewn that it is not by the educated that the mass of offences is committed, but by the ignorant, whom the extension of the system of education has not reached, or by the ill-instructed, with whom the system, through some accident or defect, has not advanced far enough to produce any effect. If, therefore, these propositions be true, which I by no means admit, the causes must be looked for elsewhere, and I believe they may be easily found in circumstances connected with the social, rather than with the moral, condition of communities. But the development of this subject would lead me beyond my present limits, and deserves a special consideration not suited to the present occasion.

On the best Method of Collecting and Arranging Facts, with a proposed new Plan of Common-place Book. By WILLIAM AUGUSTUS GUY, M.B., Cantab. Professor of Forensic Medicine, King's College, London, and Assistant Physician to the King's College Hospital.

THE advantages of order, method and arrangement to all who are engaged in the pursuit of learning or science, are too generally recognised to require any comment. Without some attention to them it is almost impossible either to learn thoroughly that which is already known, or to add anything to our present stores of knowledge. Now, there are two ways in which we may hope to extend the boundaries of knowledge;—either by original observations and experiments, or by a searching and rigorous analysis of the facts collected by those who have preceded us. This latter employment of our faculties can alone give us a claim to the praise of learning, too often awarded to a useless and ill-assorted collection of facts and theories, loosely held together, and unprofitable alike to their possessor and the world. Some share of learning, in its true and best sense, is essential even to those who are engaged in original investigations, as, without it, they may enter upon enquiries which have already been successfully undertaken, and find, after much thought and labour, that their pains have been bestowed in vain.

But if some share of learning be necessary to all who devote themselves to the pursuit of science, how much more essential is it to those who are engaged in the study of sciences of observation. These sciences are characterised chiefly by the vast number of objects which they embrace, the compound and complex nature of the facts which they contemplate, and the varying proportions in which the elements, so to speak, of these facts are combined. Those sciences especially which have a direct bearing on the welfare of mankind become of necessity practical arts, and engage in their service a number of votaries proportioned to their importance, and to the frequency of their applications. This remark applies with peculiar force to the science of medicine, which, in every country, and in all ages, has had a larger number of professors than any other science whatever; and, as a necessary consequence, has received scientific and practical contributions from a much greater number of hands. The surpassing value of health gives so great an importance to every application of the healing art, and surrounds individual cases with so much interest, that medicine has become, of necessity, a science of detail, and its records a collection, for the most part, of isolated facts, either really curious in themselves, or invested with attributes of wonder and importance by the inexperience of those who have observed them. The engrossing nature of the practical pursuits of the physician, by leaving him little time for collecting such facts as may form the basis of a wide generalization, combines with the cause I have just pointed out to fill medical books with detached cases, hasty conclusions, and crude hypotheses. Not that medicine does not possess its well-digested collections of facts, and its true theories; all I would assert is, that these bear but a small proportion to its imperfect details, and its superficial conclusions. But the isolated facts which have been collected, and the suggestions which have been from time to time thrown out, form a rich mine of wealth which may be turned to good account if properly worked. There

are ample materials, but they can only be rendered available to the improvement of the science and the art of medicine, by bringing into use accurate methods of arrangement, and powerful instruments of analysis.

The science of medicine is here put prominently forward, partly because it is the one with which I am best acquainted, and which has suggested the method of arrangement I am about to advocate; and partly because, combining as it does, in an extraordinary degree, all the difficulties which attach to sciences of observation in general, it stands more in need than any other science whatever of improved methods of collecting, arranging, and classifying facts. The remarks which apply to the science of medicine, however, are applicable, though perhaps in a less degree, to other sciences of observation, the most advanced of which has not yet outrun the necessity for improved methods of investigation. Even that *social* science which it is the great object of the Statistical Society to promote, must seek in the imperfect records of the past for information which it cannot safely neglect, and must turn that information to account by resorting to the same methods which are calculated to improve other sciences of observation. Nay, the necessity must soon arise of submitting the facts collected by improved methods, and the results expressed in the more accurate language of numbers, to the same process of comparison and analysis to which we now submit the imperfect data of those who have gone before us. It is because the Statistical Society, in addition to its first and great object of collecting facts bearing upon man's social condition, and expressing the results of those facts in the simple and concise language of figures, takes upon itself to draw up plans and instructions for the guidance of those who are engaged in making observations, that the following suggestion of a new method of common-place book, seems to find a suitable place in the pages of its Journal.

A man can scarcely be said to read to much purpose who trusts his learning to the care of his memory, nor can he observe with advantage who consigns his facts to the same uncertain keeping. In order to turn either the one or the other to good account they must be committed to writing. But though the knowledge thus transferred to paper is certainly more available than that which is entrusted to memory, it will be of comparative little use unless it be so arranged as to be easily found when wanted. There are very many who are deeply impressed with the advantage of committing to paper the facts which they glean from authors or from their own observation, but who nevertheless contrive to render their labour unserviceable by the neglect of method. They either write their notes on the first scrap of paper which comes to hand, and then place it in their pocket or in a drawer, to swell a large collection of similar materials illustrative of all sorts of subjects, and heaped together without any attempt at arrangement; or they make their entries in a book in the order in which they present themselves to their notice. This latter plan possesses some advantages which the former wants. The loose papers accumulate till they become so numerous as to deter the most patient from any attempt at arrangement, and the most enterprising from the task of discovering any particular fact among so large a heap of rubbish. Their fate, sooner or later, is to light a fire or a candle. A book, on the contrary, keeps the several facts together, and

is likely to be occasionally referred to so long as the entries are few in number; but as they increase, the search after any particular passage becomes more and more difficult, and wastes more and more time, till, at length, it is allowed to slumber quietly on its shelf, fortunate if it be not condemned to be sold as waste paper. If the materials thus collected are ever turned to any account it must be at a great sacrifice of time.

The most obvious improvement of which such a book as the one I have described is susceptible, is the formation of a narrow column at the side of each page, containing brief references to the subject matter of the several entries, so that the eye in glancing down the pages may meet the fact of which it is in search. The next improvement is the formation of an index by which the several subjects may be referred to at once, and the labour of the search be materially abridged.

Locke adopted both these arrangements in the common-place book which goes by his name, and, as he thought his method of sufficient importance to deserve publication, I shall briefly describe it. His book was furnished with an index, and blank pages numbered in the usual way. His index occupied two pages, each divided by a vertical line into two equal parts, and each of these parts again into a smaller and larger vertical column by lines drawn near the left-hand margin. The entire page was then subdivided into 10 equal parts (5 on each half-page) by as many horizontal lines. In this manner the two pages were divided into 20 parts, and each of these 20 parts into two vertical columns of unequal size. In each of the 20 smaller vertical columns a letter of the alphabet was written, the column C being shared with K; that of I with J and Y; and that of U with V and W. A second small vertical column was now made parallel to the first, and each of the five parts into which it was divided was again subdivided into five equal parts by as many horizontal lines, which were also extended across the five divisions of the larger column. In the subdivisions thus formed, the five vowels, *a, e, i, o, u*, were written. In this manner the index was made.

To make this description more intelligible, I have annexed a plan of the index, p. 366.

The blank pages were merely divided by a vertical line drawn near their left-hand border into a small margin and a large space. When an entry was to be made in this common-place book, two pages were chosen facing each other, and on the first of these the extract or the fact was entered, the subject to which it referred being written in the margin in larger characters. The fact or extract was found by entering the number of the page in the index, in the division corresponding to the initial letter of the word in the margin, and in the subdivision corresponding to the first vowel occurring in the word. Thus, the index to the word *Acheron* was the page in which the word occurred, entered in the subdivision *e* of the letter *A*. A separate page being thus devoted to a combination of the initial letter with a first vowel, all topics designated by words beginning with the same initial letter and first vowel were entered in the same page. Thus, all that referred to the subject *Aer* was entered in the same page with the subject *Acheron*, and so on for any number of subjects. Such is the plan adopted and recommended by Locke, and employed, as I have reason to believe,

though with some slight modifications, by most persons who make use of a common-place book.

It is strange, indeed, that such a man as Locke, impressed with the value of method, should ever have adopted so imperfect and arbitrary a plan, or having once adopted it, that he should not have improved upon it; for surely nothing can be more opposed to all method than the grouping of subjects together, without any other bond of connexion than an initial letter and a first vowel. One obvious improvement on this plan at once suggests itself, and that is to set apart one or more pages for each subject, and to extend the index so as to give a page or two pages facing each other to each letter of the alphabet; if the index is likely to be extensive these pages may then be subdivided into five columns headed by the five vowels, as in Locke's plan.* This is the form of common-place book which I first adopted and used for some years, till experience suggested the necessity for an improved method.

The objection to Locke's common-place book, as I have just stated, is this—that a number of totally different subjects are entered in the same page, or succession of pages, which subjects are held together by no other relation than that of an initial letter and first vowel. It is true that so long as these entries are few in number there is little loss of time in referring to them, but if they become very numerous many pages may be passed in review before the desired passage meets the eye. But even this inconvenience is not of sufficient moment to require the adoption of an improved method, where each of the several entries refers to a different subject. It is only when a great number of passages referring to the same topic are scattered through a succession of pages that the inconvenience of this plan is severely felt. It was this obvious inconvenience which induced me to adopt the improvement of devoting a separate page, or series of pages, to each separate subject. But even here I soon found the same objection to apply which lay against the common-place book of Locke. As long as the entries referring to any particular topic were few in number, my common-place book answered well enough; but when the subject began to occupy many pages, I found that if I wanted to make use of it, to digest the materials which I had collected, to analyze them, or to write about them, I had to re-arrange the whole, and to place extracts or facts of my own observing which related to one part of my subject, or threw light upon any isolated question connected with it, by themselves, that by viewing them in connexion I might better understand their bearing and estimate their value. Thus, the original labour of inscribing the several extracts or facts in my common-place book had to be repeated with regard to all those parts of my subject to which I was induced to pay particular attention. To place the inconvenience of this method in a strong light, I may instance one subject which occupies upwards of sixteen closely written pages in a large quarto volume, contains upwards of 250 quotations, abstracts, facts, or

* Todd's "Index Rerum," which is merely an index constructed in this way, is very useful in making references to authors. The index occupies the whole of the book, and a number of pages is given to each letter of the alphabet proportioned to the frequency of its occurrence in names or subjects. These pages are then portioned out among the initial vowels, and the entries are made on the page corresponding to the initial letter and first vowel of the author's name or subject.

references, and embraces almost every topic of interest connected with it. With all the assistance derived from the marginal references, much time must necessarily be lost in selecting the quotations or facts referring to any one symptom observed, or remedy employed, or bearing upon any disputed point; and it is obvious that the information collected could only be made available by being re-arranged, whether for my own information or the instruction of others.

As a remedy for this obvious defect, two plans suggest themselves; the one is the employment of a separate common-place book for each separate subject, each page or succession of pages being devoted to a distinct subdivision of the subject, and this subdivision being entered in the index, or the use of separate leaves of paper either arranged in order in a portfolio, or converted into a book by means of a paper-holder. When the attention is directed to one or two subjects only, the employment of books will perhaps be preferable to that of loose papers; but when the number of subjects, as often happens, is very considerable, and extends through the whole range of a vast science, the expense alone might prove a valid objection. The use of a book, too, is, in any case, incompatible with accurate arrangement, as each division and subdivision of the subject must continue to occupy the place in the volume which was first assigned to it. For these reasons loose papers are to be preferred to books.

The plan which, after long experience of different methods, and many successive trials, I have at length adopted, is the following. I furnish myself with a large quantity of paper cut into half-sheets of the size of large letter-paper. I form a margin about an inch broad, a column about two inches broad, and a second sufficiently broad to receive two figures, by means of vertical lines drawn towards the left-hand margin of the paper. The margin is not written upon, the first column is intended for a short reference to the subject matter of the several entries, the second narrow column for numerals employed to facilitate reference from one paper to another, in case the entry, as often happens, refers to more than one subject, and the remainder of the paper for the entry itself. If the entry be a quotation or abstract from a book, the name of the author and title of the work, with the date and page, are subjoined.* At the right-hand corner of the paper the subject is distinctly written; the object of this is to enable me to replace the papers should they by any accident be mislaid. Beneath this, but in the centre of the paper, the subdivision of the subject is written, and below this again the distinct proposition, general statement, fact, or theory which the first entry illustrates. If fresh facts illustrative of the same point occur in the course of my reading or observation, they are immediately entered on the same paper; and when the first paper is filled, a second is provided with the same headings, the figures 1 and 2 being written at the right

* Where many extracts are taken from the same author it is desirable to avoid repeating the exact title of the work after each quotation, and yet it is equally desirable to have at hand the exact title, either for the purpose of citing its authority, or of referring to it again. With this view Locke's suggestion may be followed with advantage, which is to keep a book for the entry of the titles of works, with the date, size, and number of pages. By noting the number of pages contained in the book, we are enabled by a simple calculation to refer to a different edition or copy from that which we at first employed.

hand corner, and so on for any number of papers. According to this plan classification is carried to the utmost degree of minuteness, each separate leaf containing not merely a subdivision of the principal subject, but a distinct proposition, and no two propositions being allowed to find place on the same leaf. Every fresh illustration is entered as soon as it occurs, furnished with its marginal reference, and its distinctive numeral.

Thus to take the first example that comes to hand. The subject is, the influence of the mind upon the body; the subdivision, the influence of the imagination on the senses; and the particular point to be illustrated, its influence on the sense of sight. This entry will be made in the following manner:—

INFLUENCE OF THE MIND ON THE BODY.

OF THE IMAGINATION ON THE SENSES.

Sense of Sight.

Ingenious mode of detecting a Thief.	I.	The Kamtschadales have a firm belief in the supernatural power of the Schamans. "A Kosak once profited by this credulity to regain his stolen property, in a very ingenious manner. While on a journey with several Kamtschadales, he had some of his tobacco stolen from him, and after questioning each individual separately, he was unable to discover who was the thief. He accordingly took some sticks, and making them of equal lengths, gave each of them one, with the assurance, that the stick of the thief would infallibly grow longer by the power of schamanry. This unpleasant intelligence had such an effect on the imagination of the thief, that he actually conceived that his stick did increase in length, and thought to relieve himself from this dilemma by breaking a piece off. The next morning every Kamtschadale carrying back his stick, the thief was discovered."— <i>Sarytschev's Travels</i> , p. 68.
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The influence of the imagination in misleading the senses is further illustrated by entries proving its effect on the sense of hearing, touch, &c., all entered in the same form as the above.

Sometimes one heading alone is sufficient, as in the following example:—

SEA SCURVY.

Mortality.

Nearly the whole of the Crew. Peron.	I.	Peron says the voyage to the Southern Hemisphere, "deprived us of nearly the whole of our crew."—Vol. i. p. 262.
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Here follow quotations from Anson's Voyages, &c.

If these papers were carelessly thrown into a drawer together, they would be scarcely more useful than so many scraps written on loose papers of different sizes and shapes. To turn them to good account, it is necessary to add careful arrangement to minute subdivision. This is easily effected. The first paper referring to any given subject is placed, as soon as it is written, in a rude portfolio, made of a folded sheet of paper of larger size, and the name of the subject is written in distinct characters on the outside. This portfolio is then placed in a drawer, or box, with others referring to the same class of subjects. The drawer or

box may, if necessary, enclose a list of the subjects contained within it, but unless they are numerous this will not be required. Any fresh papers illustrative of the same subject, but of different subdivisions of it, are placed at first in the same portfolio. As soon, however, as these papers accumulate to such an extent that time is lost in searching for any particular proposition, the necessity of more minute arrangement makes itself felt. To effect this, those papers which refer to any subdivision of the principal subject are collected and placed in a separate portfolio, with the name of the principal subject and of the subdivision written distinctly on the outside. This is done with regard to all the subdivisions; and thus a number of portfolios, with the subject and subdivision distinctly written on the outside, are substituted for the single one which in the infancy of the collection was sufficient to contain all the information which had been brought together. These portfolios may then be placed in a separate drawer or box. When they have become very numerous, and their contents have greatly increased, they are ready to be converted into a book. This is done by first arranging the several portfolios in the order in which their contents ought to be placed, and re-arranging the contents themselves with great care. We now substitute for the several portfolios an equal number of leaves of paper of a stronger quality than those on which the extracts are written, and of a larger size. These papers are cut so as to form an index, and lettered. The contents of the portfolios are then arranged in order after the several papers forming the index, and the whole assemblage of papers is prefaced by a list of the subjects, with a reference to the letters of the index. In this manner both the place and use of the index is inverted, and instead of occupying the first pages of the book, it is, like Todd's "Index Rerum," contained in the body of the book, whilst the first page (which is so cut as to leave the index uncovered) contains a list of the several subdivisions, with a letter of the alphabet placed after each of them. In making use of this book we have merely to cast the eye down the title-page, or table of contents, to find the subject and the index-letter by which it is distinguished, and then turning over the page of the index which carries that letter upon it we find all the information collected upon that subject in the papers which follow it. To convert these papers into a book, all that is required is a cover resembling the outside of a book, with a broad flexible leathern back, and a spring consisting of two pieces of steel, joined at either end by a rack pierced with holes. By making one of the pieces of steel moveable any degree of pressure may be exercised on the contents of the volume. As fresh materials accumulate they may be placed, *pro tempore*, in the position which they ought to occupy, and admitted into the volume by the readjustment of the spring. The spring is applied to the flexible leathern back, and compresses the margin of the paper, which was left blank for that purpose.*

This process of converting loose papers into books is what has gradually taken place with regard to the Pulse, a subject which has long interested me, and in illustration of which I have collected extensive materials in the course of my reading or experience. At first the

* The spring, which is the invention of my friend the Rev. J. Edwards, of the King's College, may be procured with covers, ruled papers, and indexes, at Fisher's, Bookbinder and Stationer, 1, Hanway-street, Oxford-street.

subject occupied a single page in my common-place book, then, when I adopted the plan I am now advocating, a separate portfolio; then the effect of posture on the pulse separated itself from the other parts of the subject, then the diurnal variations, then the relation of the respiration to the pulse, and so on. The pathology of the pulse soon became sufficiently important to be detached from the physiology, and split up into several sections—such as the pulse in consumption, &c.; then the effect of remedies on the pulse became an important subdivision, and digitalis, opium, tobacco, nitre, &c. had each one or more pages devoted to them. The loose papers having thus accumulated were converted into a book, and took their place upon my shelves.

In the manner I have described several subjects are growing day by day under my hand, extending themselves in every direction, and arranging themselves almost mechanically, requiring no intense application at any moment, and forming rather an amusement than a toil. My papers reason for me, for each contains a single proposition illustrated by facts gleaned from books or from observation. If an essay or a book is to be written, it is ready to the hand; if a lecture is to be delivered the materials are already arranged. A few words will connect the detached propositions, and furnish forth a discourse rich in learning or in facts.

Such are the principal features of a plan which I have myself adopted after some experience of the defects of Locke's system of common-place book, even in its most improved form, and which I venture to recommend with confidence as a means of economizing time, of encouraging habits of order, so essential to clearness and precision of thought, and of heaping up materials always ready for use. I know indeed of no means by which reading is likely to be rendered so profitable as by the reflection which must be exerted on every fact as it is thus arranged in its proper place, and in due relation to others; and I know from actual experience, the great superiority of a method which implies the constant exercise of reason and reflection over that which, consisting merely in transcribing the thoughts of others, is but too apt to convert the man of learning and science into a mere amanuensis.

“He who reads
Incessantly, and to his reading brings not
A spirit and judgment equal or superior,
Uncertain and unsettled still remains,
Deep versed in books, and shallow in himself.”

And these lines apply with equal force to those who write incessantly without digesting and arranging that which they transcribe.

The mental training implied in the employment of such a method as that which I have described, the necessity of ascertaining the precise meaning and scope of every passage committed to paper, and of expressing it in the fewest possible words, form the chief recommendation of the plan which I propose. Another advantage which it possesses over the ordinary forms of common-place book, is the close correspondence of the method itself with the mental process by which sciences are built up. First, a single fact is observed, then many others resembling it in some general features; then, with accumulation of observations, confusion, and an effort at subdivision; then the formation of smaller groups, and lastly the re-union of the several groups with others formed by a similar process, and the construction of separate sciences.

Hitherto, I have spoken of this method of common-place book as applicable only to science. It is at least equally applicable to learning and literature. The scholar may collect passages in illustration of disputed points in philology; the historian may bring together the scattered materials of history; the author, in the lighter walks of literature, may cull the flowers of fancy, or the gems of wit; and the divine may heap up his treasures of sacred learning; each will find such materials as he possesses readily available for the purposes to which he wishes to apply them.

But the best use to which this, or any other similar method admits of being applied, is the evolution, so to speak, of new branches of science, and occasionally of entire sciences, from those of which they formed a part. As examples of such separation I may instance forensic medicine, which has lately detached itself from the science of medicine in general, and become an independent branch of study, and the still more important one of Hygiene, which promises soon to follow the example of its sister science. The materials for the construction of both these sciences originally lay wrapped up in works on the several branches of medical knowledge, and are not yet completely separated from them. It is only by a method which seizes each fact or illustration as it occurs in works on the original science of which the new sciences are off-shoots, and places them at once in the position which they ought to occupy, and the point of view in which they ought to be contemplated, that such sciences can be speedily and securely built up. The remarks which apply to the formation of new sciences, apply equally to the more complete illustration and expansion of subjects of importance which have not hitherto received the attention they seem to merit. Almost every science abounds in subjects of this kind which, without being sufficiently important to deserve undivided attention, might form a source of amusement and relaxation from severer studies. The facts in illustration of such subjects would accumulate slowly and imperceptibly, until they grew to the size of goodly volumes, which, if not published to the world, might form an acceptable bequest to some of our public libraries. The complete and minute arrangement of their contents would give them a value scarcely inferior, in some respects even superior, to that of printed volumes. Men spend their lives in collecting, preserving, and arranging material objects in illustration of the natural sciences—in making museums at great labour and heavy cost; with much more ease, and at the expense of a few reams of paper, they might collect museums of facts and thoughts, arranged with equal accuracy, and, though less showy, not less useful. By this means they might satisfy, at the same time, their love of knowledge, and that passion for accumulation which is always seeking its own gratification, whether by the hoarding of wealth, the collection of natural objects, or the heaping up of the more hidden treasures of the mind.*

I have already made a passing allusion to the use of this method in the service of Statistics, and I now propose to give an example of its

* There is still one other use to which this method of arrangement may be applied, and that is the formation of "*Catalogues Raisonnés*." I have already used it with advantage in making a catalogue of the books contained in the medical library of the King's College, and can speak with confidence of its advantages when so applied. Without such a catalogue a library is deprived of the greater part of its value.

application to that purpose. As statistical facts, and the theories deduced from them, differ from other facts and other theories only in the dress they wear, the same plan which admits of application to the one, may be used with advantage in the service of the other. Two points especially deserve attention in all statistical enquiries, *viz.*, the circumstances under which the individual observations are made, and the numerical results to which they lead. Those who are most familiar with statistical researches will be most ready to acknowledge the necessity of some method by which both these points shall be accurately recorded. The plan which I have described offers every facility for accomplishing this object. As an example of its use, I have selected the subject of the "Growth of the Body," which, amongst other points of interest, includes the subject of stature—a subject which has been ably examined by Hargenvilliers, Villermé, Quetelet, and others. Taking the stature of adult males in different countries, as the part of the subject requiring illustration, it will be found that no two statistical results hitherto obtained are strictly comparable, and yet that the authors who have written upon the subject, have thrown them together as if they really admitted of comparison. Thus taking the militia regiments of different countries as standards of comparison, we find each country prescribing a different stature as that below which men shall be inadmissible to serve; and some statistical returns include those only who are actually admitted, others, all who were presented for admission. Again, if we compare two countries in which the conscription is in force, both of them shall fix a different standard of height, and a different age. If we turn to the observations made on civilians, some important point is omitted in one case, which is attended to in another, or the parties measured belong to different classes of the community. Nevertheless, in spite of all these discrepancies, the facts in themselves deserve to be recorded, and to be reserved till other facts, in every respect comparable, have been collected. The facts in illustration of this, as of many other subjects, are often found where they are least to be expected; and whether they are written down at the time, or referred to when wanted for immediate use, it will be equally necessary to ascertain and express in writing the exact value of those facts, preparatory to throwing them into the form of a regular treatise. A short time since, in the course of my reading, I met with some interesting facts in illustration of the subject of stature in the "Edinburgh Medical and Surgical Journal," and I now make use of them as an illustration of the employment of my system of common-place book for statistical purposes. The principal subject, which includes that of stature, is the growth of the body; of this subject stature is one of the subdivisions, and of this again the stature of adult males forms a part. The stature of adult males may be determined in different ways, but the most likely means of arriving at it, is by the comparison of the militia, conscripts, or regular army of different countries. But the difficulty is to find facts strictly comparable. In the absence of these, and with a view to arrive at approximative results, we must class such facts together as bear the closest resemblance, taking care to state all the known circumstances under which the measurements are made. This statement is made in the larger columns, whilst the smaller one exhibits the numerical results obtained. The following example will sufficiently explain my meaning.

GROWTH OF THE BODY.

STATURE OF ADULT MALES IN DIFFERENT COUNTRIES.

Militia Regiments.

SCOTLAND.

Maximum.
ft. in.
6 1

Minimum.
ft. in.
5 4

Mean.
ft. in.
5 8

I. In the "Edinburgh Medical and Surgical Journal," vol. xiii., p. 260, the stature and circumference of the chest are given in 5,731 men belonging to 11 Scotch militia regiments. The facts were furnished by an "army contractor, a man of great observation and singular accuracy." The age is not stated. Not stated whether the men (which is highly probable) were measured in their shoes. Not stated whether any, or what, standard was prescribed.

	Maximum. ft. in.	Minimum. ft. in.	Mean. ft. in.
	6 1	5 4	5 8

Of these 5,731 men there were—

	ft. in.	ft. in.	No. of Men.	Per cent.
From	5 4	to 5 5	721	= 12·58
,,	5 6	5 7	1815	= 31·67
,,	5 8	5 9	1982	= 34·58
,,	5 10	5 11	896	= 15·63
,,	6 0	6 1	317	= 5·54
			100,00*	

The following Table shows the average stature in the 11 militia regiments belonging to different counties in Scotland. The greatest number from which any one average was taken was 736 (Argyll), the least, 210 (Kinross):—

	Regiments.	Average Height in Inches.	ft. in. lines.
Greatest Average ft. in. lines 5 8 7	Kinross.	67·20	5 7 2
	2nd Fife	67·29	5 7 3
Least Average. ft. in. lines. 5 7 2	Highland Lanark.	67·39	5 7 4
	2nd Argyll	67·74	5 7 9
	1st Argyll	67·76	5 7 9
	2nd Edinburgh	68·04	5 8 0
	East Stirling	68·06	5 8 0
	Annan and Eskdale	68·15	5 8 2
	Peebles.	68·38	5 8 5
	Kirkcudbright.	68·59	5 8 7
	6th Lanark	68·60	5 8 7

CANTON OF GENEVA.

Maximum.
ft. in. lines.
6 3 7

Minimum.
ft. in. lines.
5 0 9

Mean.
ft. in. lines.
5 6 3

Age.
19—22.

Mean.
20½.

II. The following results were obtained from the militia of the Canton of Geneva, for the years 1805-1814. The smallest stature admitted was 4 ft. 9 in. (pied de Roi = 0·32484 mètr.) = 5 ft. $\frac{3}{4}$ in. English. Age 20 years 1 month, to 21 years 1 month, giving a mean of 20 years 7 months. There were, however, some few below 20, and some few above 21. The average would be about 20½ years. Not stated whether or not the men were measured in their shoes. Total number of men 2,940.

Maximum height, 6 feet 3 inches 7 lines English.

Minimum ,, 5 ,, 0 ,, 9 ,,

Mean ,, 5 ,, 6 ,, 3 ,,

"De la taille moyenne de l'homme dans le Canton de Genève, par M. Edouard Mallet. Memoire lu à la Société de Physique et d'Histoire Naturelle, le 17 Decembre, 1835."

* This calculation in the original is incorrect.

Though these two results are not strictly comparable, they resemble each other sufficiently to admit of being placed under the same heading. The particulars mentioned in the text shew in what the statements of the authors are deficient, and in what points the facts actually collected differ. I have omitted a long table, extracted from M. Mallet's "Memoire," because I was anxious to avoid extending my illustration too far; but this table, which gives the number of men, and the number per cent. at different statures, may be safely compared with the facts reported in the "Edinburgh Medical and Surgical Journal," provided it be true that the growth of the body is nearly completed at the 21st year,* and that the measurements were taken in the same way, either with or without shoes. On comparing the table in the "Edinburgh Medical and Surgical Journal" with that given by M. Mallet, I find that though the maximum height of the Geneva militia exceeds that of the Scotch militia regiments, the number of men of great stature in the latter is much more considerable, as will be seen from the following comparison:—

	Scotland.	Geneva.
Above 5 feet 8 inches . . .	55·75 per cent.	24·18 per cent.
Above 6 feet	5·54 „	0·81 „

In this, as in many other examples, facts not strictly comparable will be found to contain some points in which a strict comparison is possible, and these points can be separated by a careful analysis. The paper in the "Edinburgh Medical and Surgical Journal," to which I have referred, contains also some measurements, rarely made, of the circumference of the chest. I subjoin them, that all the information on this subject contained in that paper may be presented at one view, and the necessity for reference to the original work may be avoided.†

GROWTH OF THE BODY.

CIRCUMFERENCE OF THE CHEST, AND STATURE OF ADULT MALES IN DIFFERENT COUNTRIES, COMPARED.

Militia Regiments.

SCOTCH MILITIA REGIMENTS.	I.	The following Table, with some slight alterations and the addition of the fourth column, is taken from the "Edinburgh Medical & Surgical Journal," vol. xiii. p 263 (1817.)		
		Regiments.	Average number of inches round chest.	Average height. Proportion.
Max. circumf.		Highland Lanark. . .	38·71	67·39 1 1·74
41·01 in.		2nd Edinburgh . . .	38·79	68·84 1 1·75
Min. circumf.		Kinross	39·07	67·20 1 1·72
38·71 in.		Peebles	39·55	68·38 1 1·72
Mean circumf.		2nd Fife.	39·82	67·29 1 1·69
39·79 in.		6th Lanark	39·91	68·60 1 1·71
		2nd Argyll.	40·07	67·74 1 1·69
Max. proportion.		1st Argyll	40·09	67·76 1 1·69
1 1·67		East Stirling	40·09	68·06 1 1·72
Min. proportion.		Annan and Eskdale .	40·64	68·15 1 1·67
1 1·75		Kirkcudbright . . .	41·01	68·59 1 1·67
Mean proportion.		Average	39·79	67·93 1 1·71
1 1·71		It is not stated whether these measurements were made with or without the clothes.		

* M. Quetelet's facts shew that it is not quite completed.

† M. Quetelet, as I understand, is now collecting observations on the stature and growth of the body, and wishes to include this measurement.

When the separate papers on which the facts relating to this subject of the growth of the body have been written amount to a sufficient number to be made up into a book, the title-page and index will assume some such shape as this : *—

GROWTH OF THE BODY.		<i>a</i>
		<i>b</i>
STATURE at different ages	<i>a</i>	<i>c</i>
„ at the adult age	<i>b</i>	<i>d</i>
„ in the two sexes	<i>c</i>	<i>e</i>
„ in town and rural districts	<i>d</i>	<i>f</i>
„ in the rich and poor	<i>e</i>	
„ in factories	<i>f</i>	
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Statistics of the Population in the Parish of Trevethin (Pontypool) and at the Neighbouring Works of Blaenavon in Monmouthshire, chiefly employed in the Iron Trade, and inhabiting part of the District recently disturbed. By G. S. KENRICK, Esq., of the Varteg Iron Works.

A KNOWLEDGE of the physical condition, the habits and attainments of a people, are necessary for the purpose of framing any sound plan for improving their condition by benevolent institutions, or restraining their excesses by penal enactments. The neglect of this consideration has been the cause of many crude and ill-considered attempts at legislation, arising from an imperfect knowledge of the condition and of the wants of the mass of the community, until some sudden convulsion brings them with startling effect too prominently into view, when all causes and effects receive an undue colouring from present apprehension. On the other hand, the condition of the lower classes in large towns, who live in damp cellars situated in ill-ventilated and undrained streets, is frequently so bad, that if it were generally known more strenuous efforts would be made, and some means would be found, to alleviate sufferings,

the acuteness of which cannot be brought home with sufficient distinctness to those who are in the constant enjoyment of every comfort which ample means can supply, and who have a very inadequate, if any, knowledge of what passes in those unhealthy portions of their own towns which they never have occasion to visit. Every attempt, therefore, to display to the wealthy classes of society the real condition of the mass of their labouring and necessitous neighbours, and to produce a feeling of commiseration in the one, and of thankfulness and good-will in the other, is likely to be beneficial to both.

With this view, the following account is furnished of the parish of Trevethin,* and of the Iron Works of Blaenavon in the adjoining parish, consisting almost entirely of the working classes employed in the Iron trade, of the shopkeepers who supply them with food and clothing, and of the few agriculturists who inhabit the cultivated portion of the district, a considerable part being open mountain land, upon which each adjacent farmer has a right of sheep-walk. The population of Trevethin is as follows:—

Population	17,196	averaging 6 to a house.
Number of houses	2,908	
Sleeping-rooms	5,496	,, 3½ persons to 1 room.
Children under 3 years of age	1,884	
,, from 3 to 12 years	3,547	,, age for education ¼th.
Married People	5,952	,, ⅓rd of the population.
Lodgers	3,537	,, ⅕th of the population.
English People	7,554	,, { 44 per cent. of the po-
Welsh ,,	8,821	,, 51 ,, ,,
Irish ,,	821	,, 5 ,, ,,
Persons who cannot speak English	106	,, ½ ,, ,,
Children who say that they go to school	1,022	
,, attending day schools, as by	} 957	
master's report		
,, attending Sunday school, as	} 2,865	
by lists		
Average attendance	2,210	
Persons who say they do not go to any	} 2,161	
place of worship		
Proportion of houses having Bibles	80	per cent.
Drunkards	1,962	= 16·6 per cent. of the population
		above 12.

The population of the parish, which in the year 1800 was as low as 1,200 persons, chiefly employed in agriculture, has rapidly increased of late years, in consequence of the erection of iron-works, which afford employment to the greater portion of the inhabitants.† The first subject which engages attention in the above return is the proportion of sleeping-rooms to the population. The average to the whole

* Spelt in the Population Returns, Trevethan. Pontypool, or Pont-y-Pool is a township situated in the parish of Trevethan.

† In 1810, Pontypool was a place of so little consideration or commercial intercourse, that it was visited by a horse post only twice a week. The letters reached Newport at 5 o'clock, p. m., but it was not deemed necessary to send them on to Pontypool, a distance of only 10 miles, that evening; they were despatched next morning and arrived about 11 a. m. The description in "Waverley," of a country post-office would then have suited Pontypool: for the letters were sometimes detained two or three weeks before they were delivered; and when a letter, from its outward appearance, seemed interesting, it was occasionally opened, before it reached the party to whom it was addressed.

parish is $3\frac{1}{2}$ persons, including children, to a sleeping-room, but there are some variations in different localities, for instance:—

Pontypool contains . . .	2,681 inhabitants, being barely 3 to a room.
The Varteg . . .	3,500 ,, exactly 3 ,,
Abersychan village . . .	1,300 ,, ,, $3\frac{1}{8}$,,
British Works . . .	1,120 ,, ,, $3\frac{1}{2}$,,
Sowhill (part of Pontypool) . . .	1,946 ,, ,, $3\frac{1}{4}$,,

In Abersychan village there are several houses too much crowded; for instance, there were four houses with only one sleeping-room each, to accommodate seven persons, of whom, in two cases, four were lodgers; the other two houses also had each two lodgers. At Pentwyn there are some houses very much crowded, as many as 12, 14, and 16 persons being congregated in one house, containing three small sleeping-rooms. In one instance, there were 12 lodgers, of whom 8 were married persons. In Pontypool 21 persons were numbered in one house, of whom 13 were lodgers. But the Sowhill is still worse in this respect, as, in a few instances from 13 to 16 persons are found occupying 1 sleeping-room. Even at the Varteg, 1 house shelters 20 Irish, men, women and children; but the Irish are so gregarious that it is difficult, in this part of the country, to separate them into small families. Many persons will be surprised to hear that in this district such a number of individuals lodge in one house, although in large and crowded towns, as London and Manchester, such instances are common; but it is probable that some of these extreme cases may be explained by the fact, that the iron-works are never idle, and that some men work at night and others during the day; so that when six o'clock strikes, one set of men leave their beds, which are almost immediately occupied by those who have been working all day; and thus by this contrivance, one room, and one set of beds, serve for a double set of tenants, and the beds are scarcely ever unoccupied. This practice is, however, very injurious to health; it is always discouraged, and prevails to a very limited extent.

Many of the houses at the Blaenavon Iron Works are much crowded, and at one of them the owner has fixed a number of berths round the room upon the floor, with another tier overhead, something like the cabin of a steam-packet.

One of the principal objects of enquiry was the number of children who were fit subjects for education at a public school; and to arrive at this fact it was necessary to divide the children into two classes, one of which contained the children under three years of age. This investigation furnished an instance of the great occasion there is for education among the people in this neighbourhood, and the credulity with which they listen to the artful and monstrous stories which have been disseminated among them. Some of the women said, "Is it true that Government means to destroy all the children under three years of age?" Others said, "Do you want to send them to Van Diemen's Land?" At Blaenavon a woman observed, "It is said that the poor law only allows us to have three children!" Nearer Pontypool some women turned their backs upon the querists. Others said, "Oh, I heard by the papers that you wanted to destroy all the children under four years of age, and I find now that the report is true." Stories of this kind were not confined to the parish of Treveithin; they were disseminated through the whole of the iron district of South Wales, and the seed sown in this

uncultivated district, flourished, and, in due time, produced the bitter fruit of the Chartist disturbances. In this parish 1 in 18 of the population receive some kind of education at day schools, though probably of a kind inferior to that which is given in some of the schools of large towns; and 1 in 8 receive education at the Sunday schools, which, though not of a very intellectual character, is yet of the most useful kind, as children are taught there how to fulfil their duty to God and to their fellow-creatures—the most important kind of knowledge.

The next class are the married people, amounting to 5,952, who bear a large proportion to the total population, considering that so many single men reside in the parish, who come from a distance, in consequence of the abundance of employment. This circumstance is counterbalanced by the early marriages of people working in a district which affords high wages, and enables a man to support a family without much difficulty. One consequence of the number of single men who come here from a distance to work is, that instead of the number of females exceeding the males, according to the ordinary law of nature, in this parish the males very much exceed the females, probably to the extent of 2,000. The small number of women, compared with the men, may be either the cause or the effect, though probably the latter, of the circumstance that very few women are employed about the iron-works, compared with the number engaged in any other staple manufacture of the country. In the cotton or woollen manufacture, in the Potteries, in the nail, the needle, and the silk trade, a large number of the persons employed are females; here the men are employed to work, and the women to attend to their domestic affairs, and prepare a comfortable fire-side to receive them in the evening. At the Varteg iron-works, the number of females employed in loading ironstone into the trams, unloading coal upon the coke yard, piling iron in the forge, making bricks, &c., is 74; the number of men and boys employed at the works is about 1,400.

The number of lodgers, 3,537, is very great, being one-fifth of the population; and about 3,000 of them are single men. This is the most disorderly portion of the population. These men can earn great wages, which are not exhausted by providing themselves with food and clothing; they scorn to lay by anything; they have not many resources from education or amusement at home, and therefore fly to the beer-shop for excitement, where they spend their evenings in dissolute company, and become familiar with bad habits and vicious companions. In such a state of things it is not surprising that the places of worship in the district are not filled, and that the jails, like the House of Correction at Usk this year, are so much crowded, that the prisoners are obliged to sleep three in a bed, spending the night in conversing upon their past exploits, and plotting fresh schemes of villany. As the number of houses in the parish is 2,908, and the lodgers 3,537, there is an average of rather more than one lodger to a house; but as there are persons in each district who make it a business to take lodgers, a considerable number of the houses have none. On the Varteg Hill, which may be taken as the average of the parish, there are 217 houses which have lodgers, and 210 which have none.

The number of English people is 7,554, or 44 per cent.; Welsh

8,821, or 51 per cent. ; Irish 821, or 5 per cent. ; from which it will be seen that in this part of Monmouthshire, a preponderance of Welsh inhabitants still prevails. Only a few years ago the jealousy between the Welsh and English workmen used frequently to break out into open war in the neighbourhood of Merthyr. 20 years ago, when Mr. Whitehouse brought a number of Staffordshire men into this district, the aborigines considered it to be such a wanton and unjustifiable invasion of their territory, that many severe battles were the consequence. Since that time the Welsh and English have made an alliance, offensive and defensive, and have from time to time practised their valour upon the Irish ; but of late even these quarrels are becoming scarce, and where temperance prevails, a row seldom occurs.

The Welshman is generally of a religious disposition, of a hot excitable temperament, but ready to listen to reason ; though he has not his passion sufficiently under control, he is not blood-thirsty. The Welsh are frugal ; there are many who come from Cardiganshire to the iron works, for 5 to 7 months in the winter season, live economically while here, and take home from 15*l.* to 20*l.* to their families, which pays the rent of their little farm, and purchases for them clothing and a few luxuries. The Welsh in this part are very neat and clean in their houses and persons, more so than their countrymen of North Wales, who are annoyed at the number of ablutions which a collier at the Varteg is expected to perform. The very small number in this parish who cannot speak English (only $\frac{1}{2}$ per cent.), is a proof that the use of the English language is gaining ground very fast. The slope of the hill effectually drains the neat cottages, and ample wages afford sufficient food, comfortable clothing, and good furniture to the workmen, while for the salubrity of the air, and beauty of the country, no county in the kingdom excels Monmouthshire. From a comparison with the houses of the working classes in Cornwall, Devonshire, Middlesex, Denbighshire, and other counties, it appears that none of them possess better furniture, greater neatness, and more comfort than the cottages in the parish of Trevethin.

Intoxicating liquors are the bane of this parish, as is proved by the fact that there are 1,962 drunkards, according to their own confession, out of a population of 17,196 persons ; and this is made more manifest by attending to the progress of events for the last few years, during which wages have been high, and employment regular.

	Have been Earning per Week.
The furnace-men, founders, pudlers, rollers	20 <i>s.</i> , 35 <i>s.</i> , 40 <i>s.</i> , 60 <i>s.</i> , to 70 <i>s.</i>
The colliers and miners, taking the average, } after paying for powder and candles	22 <i>s.</i> 6 <i>d.</i>
The navigators	18 <i>s.</i>
The farm-men and agricultural labourers	12 <i>s.</i> to 15 <i>s.</i>
Boys	4 <i>s.</i> to 12 <i>s.</i>
Women	7 <i>s.</i> to 8 <i>s.</i>

If this period be compared with the year 1822, when the colliers at the Varteg did not earn upon an average 12*s.* 6*d.* a week, the question arises, What are become of the savings of the working men ? Have they been placed in the savings' bank ? Surely not : for although it will be found that agricultural labourers, earning 12*s.* a week,—girls in service, with 4*l.* per annum, apprentices with their trifling income,—have saved money ; yet, not more than 20 persons from the iron-works, out of

a population of 12,000, are found to have placed deposits in the savings' banks. Annexed is a return from the Pontypool Savings Bank, for the year ending 30th November, 1839. The total deposits were 8,148*l.*, and the different classes of depositors were as follows:—

20	colliers and miners.
48	female and farm servants, chiefly agriculturists.
77	children under age.
76	small tradesmen and farmers, their wives and children.
8	trustees for children and others.
6	charitable societies.
25	friendly societies.

Total . . . 260

It is clear, then, that the savings are not gone to the bank. What is become of them? Are they invested in houses and lands? There are some houses built by working men, but the number is very small. On the Garn, which is a favourable situation, in the centre of three iron-works, only 91 have been erected during a period of 15 years. It is to be feared that the savings of the workmen of this parish go almost exclusively to the 170 beer-shops and public-houses which are spread over the parish in every direction. In the year 1831, 37 public-houses supplied the wants of the whole parish, but at present there are 38 public-houses, and 132 beer-shops, making a total of 170 places for the sale of intoxicating drinks; besides a number of houses where it is sold without license under the characteristic name of Bid-alls. About a month ago a good many men at the Varteg Forge turned over a new leaf, and became temperate, when an immediate change took place. These men were not previously much in the habit of going to a place of worship, and the nearest chapel was three-quarters of a mile off. In one week applications were made for ground to erect three places of worship, and one school-room, by those very persons who, as drunkards, had rested satisfied without any for 20 years previously: 25 of these men immediately joined a reading society belonging to the works.

In Trevechin there is a parish church, and two chapels of ease, capable of containing 1,900 persons; the average attendance is 900. A new chapel of ease will soon be ready, as it is now covered in. The average attendance of Sunday-scholars is 205. There are 23 chapels capable of containing 7,855 persons, and the average attendance is 4,665; the number of children attending the Sunday-schools averages 2,005. In addition to the above, the Catholic priest occasionally holds a meeting at the British Lion public-house, for want of some better place for the purpose.

The following are the measurements of all the places of worship in this parish, as taken by C. Conway, Esq.

		Feet.
Established Church, 4 places, containing	9	2,250
Baptists . . . 5	„	9,316
Independents . . . 6	„	8,382
Wesleyans . . . 7	„	9,288
Primitive Methodists 2	„	1,098
Calvinistic „ 2	„	2,243
Unitarians . . . 1	„	312
Catholics . . . 1	„	1,192
Total . . .	41	<u>41,081</u>

The above measurement does not include the chancel and belfries in the church, nor the vestries in the chapels; but it gives the absolute room devoted to worship on the Sabbath. It is calculated that 4 feet are sufficient for one individual; it follows, therefore, that room is provided for 10,270 worshippers, and the number who attend, on an average, including 2,210 Sunday scholars, is only 7,775.

Four-fifths of the houses in Trevethin are provided with Bibles, and in many there are even 4 or 5 Bibles belonging to different members of the family, with frequently a hymn-book or some other religious publication. It is pleasing to observe, that whenever the workmen collect together a few books, they are always those of a moral tendency.

It may not be uninteresting, nor is it foreign to the subject, to refer to the expense of supporting the poor in this parish. In the present instance the exposé speaks favourably of the population of Trevethin—

	Per Head.
In England, with 662 poor law unions, and a population, according to the Census of 1831, of 11,166,000, the expenditure in 1838 was 4,254,000 <i>l.</i> or	7 <i>s.</i> 7 <i>d.</i>
„ „ in 1837	5 <i>s.</i> 10 <i>d.</i>
In Trevethin, with a population of 17,196, the expenditure from Christmas 1838 to Christmas 1839, was 1,233 <i>l.</i> , or upon the total population	1 <i>s.</i> 5 <i>d.</i>
Throughout Holland, the annual expenditure for the poor is	4 <i>s.</i> 4 <i>d.</i>
In Philadelphia	4 <i>s.</i> 6 <i>d.</i>
In those towns in France where the provision is well organized	10 <i>s.</i>
In Venice	18 <i>s.</i>

So that with regard to the burden of supporting the poor, Trevethin may be considered as a favoured parish. In Scotland, where the New Poor Law does not exist, and the relief to the poor is dealt out with a very sparing and cautious hand—

	Per Head.
The amount is only about	1 <i>s.</i> 4 <i>d.</i>
In Edinburgh, Glasgow, Dundee, and Paisley barely.	2 <i>s.</i>

In these towns the highest provision granted to a woman and her family is 2*s.* a week; to a disabled person, 1*s.* a week. In England, to the first is given from 4*s.* to 7*s.*; to the latter, from 2*s.* to 4*s.* a week. In St. Cuthbert's workhouse, Edinburgh, the dietary of the paupers, a short time ago, cost only 7 farthings per head per day, or 12½*d.* a week; at the Pontypool workhouse the cost averages 2*s.* 8*d.* a week, exclusive of clothing.

The working classes in this parish have adopted the very praiseworthy plan of subscribing to benefit clubs, from which they receive assistance in case of sickness. There are in Trevethin—

36 Men's Clubs, 3,639 Members	{	Who pay to the Club about 1 <i>s.</i> 3 <i>d.</i> a month, and receive when sick about 7 <i>s.</i> 9 <i>d.</i> a week.
1 „ „ 1,364 „ „		Belonging to the Varteg Works exclusively. The Club furnishes medical relief to the sick, and 5 <i>s.</i> a week in cash. The other iron-works in the parish have a fund for medical relief, but not for relief in money.
37 Men's Clubs, 5,003 Total.		
7 Women's „ „ 779 Members	{	Who pay 1 <i>s.</i> 1 <i>d.</i> a month, and receive about 6 <i>s.</i> 6 <i>d.</i> a week in case of sickness.
44 Clubs		5,782 „ „

There would appear, therefore, to be 5,782 persons who are members of a sick club. This number, however, must be considerably reduced, because there are some persons who belong to two, and even three clubs; but after making a sufficient allowance on this account, there will remain 4,700 members, which is a large proportion of the adult population. The clubs are exceedingly useful to working men; the only thing objectionable about them is, that the meetings are held in a public-house; and in many cases half as much money is spent in beer and processions as is devoted to the relief of the sick. At the Varteg one of the clubs holds its meetings at the Temperance Coffee-house, and the example is about to be followed by another.

It will be desirable to make a comparison between Trevethin and Blaenavon, containing five blast furnaces and forges at Garnddyris, supporting a population which has been called into exertion by the establishment of iron-works in that barren inhospitable region, where previously there was scarcely subsistence for a shepherd and his woolly charge. In Blaenavon there are—

Houses	811
Population	5,115, averaging $6\frac{1}{2}$ to a house.
Sleeping-rooms	1,602, averaging $3\frac{1}{8}$ persons to a room.
Children under 3 years	499
Children between 3 and 12 years	982, one-fifth of the population.
Married persons	1,670, one-third of the population.
Lodgers	1,464, one-fourth of the population ($1\frac{1}{4}$ to a house).
English	1,895, or 38 per cent.
Welsh	3,134, or 61 per cent.
Irish	86, or 1 per cent.
Persons who cannot speak English	21
Children who say they go to school	306
Persons who say they do not go to any place of worship	490
Houses having Bibles	701, or 86 per cent. of the whole.
Persons who say they are drunkards	400
Average attendance at places of worship	1,135
Average attendance at Sunday-schools	545

There appears to be very little difference between Trevethin and Blaenavon in the character and distribution of the inhabitants. The houses are rather more crowded at the latter place, and the proportion of lodgers is greater. The Welshmen predominate more decidedly, being 61 per cent., instead of 51 per cent., of the whole number. Rather a larger number have Bibles, *viz.*, 86 instead of 80 per cent. The places of worship are better attended in Trevethin, where the average attendance is one-third of the population; whereas in Blaenavon it is little more than one-fifth; and, as might be expected, there is an equal difference in the Sunday-schools in favour of Trevethin. There are at Blaenavon—

	Capable of containing	Average Attendance.	Sunday School.
1 Church	550 Persons	150	115 Children.
5 Chapels	1,350 „	985	430 „
Totals	1,900 „	1,135	545 „

An important question remains as to the character of the large body of working men, who form the bulk of the population in the parish of Trevethin. They may be divided into three classes. The first consists of a steady, devoted, honest body of men, who are ready to do their duty at church, at their work, and to their fellow-men; and some of the highest qualities of the Christian character may be found in the family circles of this class. The second class, perhaps the most numerous, belongs to what geologists would call the transition series. They have many of the good qualities of the first, combined with a weakness of character which exposes them to the vices of the third class; their good impressions and good feelings have no stable foundation, for they are guided by impulse, by example, by *esprit-de-corps*, instead of any fixed principles of religion or duty. They are suffered to run wild in their childhood and youth, and it is not surprising that their untamed spirits should occasionally break the bounds of order and law. In a large population there will always be a third class, and Trevethin has not escaped it. It is chiefly composed of the young and unmarried, who get a sufficiency of money when they please, but who are idle, great talkers, indifferent workmen, and fond of laying down the law at public-houses; together with a few veteran married men, who have grown grey as agitators and disturbers of the peace. The majority of this class are given to swearing, Sabbath-breaking, gambling, and drunkenness. There are few thieves in the parish, who belong to this class, and are chiefly immigrants. The third class, though by far the smallest, always takes the lead on public occasions, because the most violent and the most loquacious. In this parish, the three classes taken together, compose a body rather above than under the usual average of men in their condition of life, both as regards their moral character and general intelligence. The condition and acquirements of the men belonging to the Reading Society will be illustrated by a reference to some of the works which they have voted into circulation, *viz.*—

Natural History and Natural Philosophy, by Arnott; Connexion of the Physical Sciences, by Mrs. Somerville; Chemistry, by Donovan; Steam-engine, by Lardner; Machinery and Manufactures, by Babbage; Introduction to the Sciences, Chambers' Edition; Locomotion, by Gordon; Commercial Power of Great Britain, (Dupin); Constitution of Man, (Combe); Natural Theology (Paley); Self-culture, (Channing); Lives of Jackson, Bruce, Peter the Great, Columbus, Nelson, Napoleon; Poems of Milton, Burns, Scott, &c.

The books belonging to this society form a well-selected library, which would do credit to the judgment of a man of education. Trevethin may claim the honour of having the only Mechanics' Institute in the county of Monmouth. The nearest institution of the kind is to be found in Bristol, and it is believed that Swansea is the only town in Wales that finds itself in a condition to support a Mechanics' Institution. Of the schools in this parish which are supported entirely for the education of the children of the working classes, there are two on the National system at Pontypool, one for girls and the other for boys, at which the average attendance is 140; together with an infant school, supported by C. H. Leigh, Esq., of Pontypool Park, containing 106 children. At the Varteg Works there are a boy's and a girl's school upon the plan of the Borough road schools, the average attendance being 100; and an infant

school, at which in general about 50 children are present. There are two booksellers in this parish, one of whom receives publications on general literature to the value of about 200*l.* a year, besides the hymn and song books sermons, &c., which are stated by Mr. Tremenheere (in his Report upon this district) to form almost exclusively the description of books which find a circulation at Merthyr Tydvil. The local booksellers do not, however, supply all the demand for books to this population, for there are travellers from the Edinburgh and London booksellers, who visit this district regularly to sell Encyclopædias and other works of an expensive kind, which are provided for the people in monthly numbers, as more convenient to persons of small means.

There is one bad feature in the character of this parish, though perhaps it is not confined to Trevechin. It is a very common thing for women to apply to the Board of Guardians for relief because they are deserted by their husbands; and it does not appear in any case to proceed from inability to support the family, but from disagreement and bad conduct, sometimes on the part of the husband only, but frequently on the part of both. It is often the case that the husband has left his wife without any previous intimation of his intention, and sometimes on the plea that he was going to look for work. Cases of this kind appear to have been more numerous of late, while the wages have been high, than formerly; but there is no accurate record of former cases. During the last 12 months, the cases of desertion brought before the Board amounted to 27.

It has been truly observed by Mr. Tremenheere, that the working classes employed about the iron-works are very much addicted to the use of intoxicating drink, which has a very bad effect upon the morals and comforts of the people; and he gives an example in the small quantity of coal raised by the men immediately after their monthly pay, compared with the quantity raised the three days previous, an uncommon degree of exertion being used before the pay, in order to earn money to be afterwards squandered in idleness and debauchery. But this rule does not hold equally good at all the works; at the Varteg, for instance, there is very little difference between the work of the colliers and miners before the pay and after it; the firemen lose time, but not much; and this may be attributed in a great measure to the formation of a Temperance Society, which has been productive of great advantage to this place, for the tea-totallers not only abstain themselves, but their example prevents others from drinking to the same excess as formerly. The magistrates and ministers of the gospel will bear testimony to the advantages which this neighbourhood has derived from the establishment of Temperance Societies among the workmen. There are now about 1,000 members of the Temperance Society in this parish, most of them residing at, or near, the Varteg Iron Works. But from this centre, societies are radiating in every direction, and there are now between 300 and 400 tea-totallers at the Blaenavon Works.

*A Statistical Account of the Book Trade of various Countries. Part II.**
 BY M. HENRY MEIDINGER, Foreign Member of the Statistical Society
 of London.

THE BOOK TRADE OF FRANCE.

IN France there is no such organization of the book-trade as in Germany. Paris is the great central point where almost all works of any renown are printed, and where the most distinguished men of letters, artists, and authors unite. The booksellers of the departments, it is true, have also their agents in Paris, but they do not maintain such a regular and constant intercourse as those in Germany. Besides, the publishers (*Editeurs Libraires*) seldom send their publications “à condition;”† the booksellers (*Marchands Libraires*) must order, and generally pay for them in cash. Sometimes, however, a credit of three, four or six months is granted. The usual discount is from 10 to 15 per cent., and for novels and stereotype editions from 40 to 50 per cent. Valuable works are often printed by two, three or more publishers, on joint account, in which case each publisher takes his number of copies on his own account.

According to the “Notions Statistiques sur la Librairie,” par le Comte Daru, 1827, the “Bibliographie de la France,” and the “Journal de la Librairie,” par Beuchot,—there appeared in France—

	New Publications.		New Publications.
In 1817	2,126	In 1826	4,347
1818	2,431	1827	4,516
1819	2,441	1828	4,923
1820	2,465	1829	6,416
1821	2,617	1830	5,364
1822	3,114	1831	5,684
1823	2,687	1832	5,756
1824	3,436	1833	6,068
1825	3,569	And in 1838	5,678‡

Among the above number are a great many pamphlets and other small publications of one or two sheets, scarcely worth mentioning, together with many small religious tracts. In 1835 the new theological publications amounted to 708 in number, whilst those relating to politics were only 275.

The censorship was early introduced into France, and exercised most severely. In an *ordonnance* of Charles IX., dated 10th Sept. 1563, printers are enjoined not to print any work “*sous peine d’être pendus ou étranglés.*” Since the 1st August, 1830, the censorship has been totally abolished, but the law still retains the power of prosecuting those who publish libels, &c.

According to the “Bibliographie de la France,” by Beuchot, the classification of new works in France was, in the five years from 1829 to 1833, as follows:—

* The former part of this article, relating chiefly to Germany, appeared in the present volume, p. 161.

† For the meaning of this term, see vol. iii., p. 170.

‡ See “Bibliopolisches Jahrbuch,” 1840, Leipzig, Weber, p. 40.

SUBJECT.	1829	1830	1831	1832	1833
Theology	805	560	436	616	586
Jurisprudence	335	226	255	282	344
Arts and Sciences, including Politics. . .	2,265	1,825	2,163	1,922	2,006
Belles Lettres, including Theatrical Works, Poems, Novels, Mythology, and Languages	1,775	1,526	1,528	1,571	1,630
History, Geography, Antiquity, &c. . .	1,236	1,226	1,302	1,365	1,502
Total	6,416	5,363	5,684	5,756	6,068

In the year 1830 there were in France 620 printers, residing in 283 towns; and 1,142 booksellers, stationers, second-hand booksellers, reading-rooms, and circulating libraries.

In 1838 more than 300 periodicals were published in Paris, *viz.*—

31 Political Papers, daily	21 on Belles Lettres
35 Ditto not daily	15 „ Mathematics, &c.
24 on Religion	28 „ Medicine
36 „ Law, &c.	12 „ Military and Naval Science
3 „ Political Economy	22 „ Agriculture
12 „ History, Statistics & Travels	23 „ Trade and Industry
44 „ Literature	7 „ Education, &c.*

In the interior of France there appeared 258 Journals, among which were 153 political papers. According to the catalogues of Brockhaus and Avenarius, printed at Paris, the total number of literary and political papers published in France during the year 1838 was 439.

The sale of the chief Paris newspapers was, in 1838, as follows, according to the “*Revue des Deux Mondes* :”—

Le Siècle 11,666	Le National 3,333
La Presse 9,700	Le Journal du Commerce. 3,100
Le Journal des Débats . 3,166	Le Temps 2,433
Le Constitutionnel . . . 5,833	Le Journal des Campagnes 3,000
Le Moniteur Parisien. . 5,300	La Gazette des Tribunaux 2,000
La Gazette de France. . 5,006	Le Journal Général . . 1,466
La Quotidienne 3,333	Le Journal de Paris . . . 833

Those of which the sale has considerably diminished are—*La Presse*; *le Constitutionnel*; *le Temps*; *le Journal de Paris*; and *la Gazette des Tribunaux*.

The Royal printing establishment in Paris (*l’Imprimerie Royale*) is, next to the printing establishment of Messrs. Clowes and Sons, London, and that of the Propaganda at Rome, the most extensive in Europe. It employs from 350 to 450 workmen. It has 120 hand presses and 6 power presses (worked by a steam-engine). A letter-press type foundry is connected with it, in which 40 workmen are employed, besides the stereotypé foundry. Of types it has—

56 different sorts for Oriental Languages.
46 ditto European Languages, using the Roman types.
16 ditto ditto not Roman.

* Another account states the number of papers at only—

26 Daily	17 on Public Education
27 not Daily	11 „ Fashion
10 on Religion (Protestant)	88 „ Law and Jurisprudence

(See *Boersenblatt*, 29 June, 1838.)

The whole mass of these types weighs above 7000 cwts.

At present the printing presses at Paris are chiefly employed upon newspapers and novels.

(See also *Bibliographie de la France, ou Journal Général de l'Imprimerie et de la Librairie, des Cartes Géographiques et Gravures, Lithographies, Œuvres de Musique, &c. Paris, chez Pillet, aîné, 22 frs.*)

THE BOOK TRADE OF ITALY.

In Italy there is no regular intercourse whatever among booksellers. It is only with the greatest trouble and expense that a work published in any part of Italy can be procured in a remote town not belonging to the same government. The counterfeiting of works is so prevalent that a book printed at Milan is counterfeited at Florence, and *vice versâ*. The censorship also presses heavily on all sorts of publications, much more so than in Germany.

The Belgian editions of French works, and the Paris editions of English works, are chiefly to be met with in Italy. French and German newspapers are very rare.

In the 15th and 16th centuries the works of many Greek and Latin authors were printed in Italy. In fact, Italy was the seat of learning at that period, favoured by universities, learned and scientific societies, and by many liberal princes and noblemen.

The "*Bibliografia Italiana*," anno I., gives the following view of publishers and new publications in 1835 :—

		Towns.	Publishers.	Works.
<i>Lombardo-Venetian Provinces</i>	<i>Government of Milan.</i>			
	Milan	1	58	502
	Other Towns . . .	12	33	353
	<i>Government of Venice.</i>			
	Venice	1	35	323
	Other Towns . . .	14	39	378
<i>Sardinian States</i> . . .	Turin	1	29	240
	Other Towns . . .	28	45	136
<i>Duchy of Parma.</i> . . .	Parma	1	9	89
	Other Towns . . .	2	3	35
<i>Duchy of Modena</i> . . .	Modena	1	3	9
	Other Towns . . .	2	2	7
<i>Duchy of Lucca</i>	Lucca	1	8	40
<i>Grand Duchy of Tuscany</i> .	Florence	1	18	78
	Other Towns . . .	5	9	47
<i>Papal States</i>	Rome	1	24	109
	Other Towns . . .	19	39	218
<i>Kingdom of the Two Sicilies.</i>	Naples	1	68	180
	Other Towns . . .	9	39	75
	Total	100	461	2,819

In Rome and Naples the booksellers (*Libraj*i) deal chiefly in old and second-hand books.

Italy has a greater intercourse in books with France than with Germany. Vienna is almost the only town of the Germanic confederation

through which books to and from Italy are sent. All foreign literature admitted by the Board of Censorship is heavily taxed as merchandise.

In the kingdom of the Two Sicilies each octavo volume has to pay 3 carlini, or 1s. entrance duty; a quarto volume 6 carlini; and a volume in folio 10 carlini, or 3s. 4d.

THE BOOK TRADE OF THE NETHERLANDS.

In the 15th and 16th centuries the Netherlands were, equally with Italy, famed for scientific printers and editions of the old Greek and Latin classics, particularly the Universities of Louvain, Leyden, Utrecht, &c. The long and bloody struggle, however, of the Netherlands for independence from the Spanish yoke, put a stop to its progress.

In Holland the chief seat of the book trade in the 19th century is Amsterdam, with 80 booksellers and second-hand dealers. Then follow—

Rotterdam, with 27 booksellers and second-hand dealers		
The Hague	26	ditto ditto
Leyden	21	ditto ditto
Groeningen	15	ditto ditto
Utrecht	12	ditto ditto

The whole production of new works in Holland was,—

In 1825	679	In 1827	741
1826	763	1828	770

Since which period it has been increasing, particularly as regards translations from the German.

The publishers in Holland have of late introduced the German system of sending their publications round to the booksellers *à condition*, but it has not yet been adopted by all.

In *Belgium*, Brussels is almost the only town where works of any note are published. They consist principally of re-publications of French and English works, which are much in demand, on account of their neatness and cheapness. There are several extensive printing establishments at Brussels, and also a joint company of publishers, whose open and avowed aim is the counterfeiting of good French and English works, published often at the same time as the original edition, or very soon after.

By the constitution of 25th February 1831, Belgium enjoys an extensive freedom of the press. In the year 1838, there appeared in Belgium 84 periodicals, of which 40 were published at Brussels.

THE BOOK TRADE OF DENMARK, SWEDEN, AND NORWAY.

In Denmark, the book trade is almost wholly confined to Copenhagen, and to the university of Kiel (Holstein.) In 1838, there appeared in Denmark, 54 daily and weekly papers, and 30 monthly papers.

In Sweden the book trade is centred at Stockholm, and at the two Universities (Upsal and Lund); in Norway at Christiana. Sweden possessed in 1836 only 17 printing establishments, *viz.*—

10 at Stockholm, (with 9 booksellers.)
3 at Gottenberg.
2 at Upsal.
2 at Norköping.

And Norway 11, all of which were at Christiana, with 6 booksellers and 2 lithographers.

The oldest book printed at Stockholm, is dated 1483, published by Joh. Snell. Calendars and prayer-books were almost the only books in demand in the 17th and 18th centuries. The frequent wars carried on by several sovereigns of Sweden did not tend to favour scientific pursuits; yet there is a great capability for the enjoyment of literature in the Swedish people, and a general desire for good instruction exists there at the present time.

The following Table shews the number of new publications in 1831, taken from the work of Carl af Forsell, "*Statistik von Schweden*," translated into German by Freese:—

	Works.		Works.
On Theology	121	On History	88
Jurisprudence	46	Geography	30
State and Financial Affairs	77	Mathematics	25
Medicine	20	Rural Economy	35
The Physical Sciences	20	Belles Lettres, Novels, &c.	134
Philosophy	11	Miscellaneous	47
Education	32		
Philology	29		
		Total	715

Among this number are many translations from the German.

THE BOOK TRADE OF RUSSIA AND POLAND.

The first dawning of literature in Russia began with Peter the Great, (1682-1725.) In the year 1713, the first book was printed at St. Petersburg, and in 1714, the first newspaper. Now there are 25 book-sellers and printers at St. Petersburg, besides several others at Moscow, Riga, Dorpat, Reval, Warsaw, Wilna, &c. Among the number are many German establishments, which supply that part of the population who speak the German language, and such of the natives as are fond of German literature, who are pretty numerous.

According to the "*Essai de Bibliographie Russe*," 6 vols., St. Petersburg, 1813-1823, there were published in Russia during those ten years 13,249 new works, including all journals, pamphlets, &c.

The following official account states the total number in 1823 to have been 635 new works, and 123 translations, chiefly from the German: *—

	New Works.	Translations.
On Theology	68	1
Jurisprudence and Politics	26	2
Medicine	53	10
Philosophy	5	3
Education	13	11
Languages	45	1
Old Classical and Oriental Philosophy	12	2
History	33	9
Geography, Statistics, and Travels	16	3
Natural Sciences	29	7
Mathematics and Military Affairs	25	8
Arts	17	6
Poetry	90	13
Novels, &c.	94	46
Miscellaneous	70	1
Books printed in Hebrew	39	..
Total	635	123

* See "*Journal des Ministeriums der öffentlichen Unterricht*," 2 Bd., 2 Heft, p. 315.

In 1833 the number of works published in Russia had increased to 758, and in 1834, it had further increased to 844. The following Table shews in what languages these works were printed:—

	1833	1834
Russian	517	541
Polish	26	37
Samoytish . . . . .	..	3
Shmudish	1	..
German	68	91
Lettish and Esthnish	14	20
Finnish and Swedish	4	6
French	35	36
English	2	1
Italian	2	3
Dutch . . . . .	..	1
Latin	47	46
Old Greek	1	..
New Greek	1	3
Persian	1	1
Arabic . . . . .	..	1
Hebrew	39	54
Total	<u>758</u>	<u>844</u>

In 1837, the number of new works published in Russia amounted to 866, *viz.*, 740 original works, and 122 translations, together with 48 periodical papers treating of politics and literature.

The importation of foreign books was,—

In 1835	300,000 volumes.*
1836	350,000 ,,
1837	400,000 ,,

THE BOOK TRADE OF PORTUGAL AND SPAIN.

Although typography was introduced into these countries very early and successfully, yet the frequent wars in which they were engaged, and the establishment of the Inquisition, checked and reduced it so much that it is at present scarcely worth mentioning. The whole number of works printed in Portugal in 1835, was 68 to 70, including the publications of the Government.

THE BOOK TRADE OF AMERICA.

Mexico was the first town on this continent in which the art of printing was practised. It was introduced there in 1555; in the United States of North America it was first practised at Cambridge in 1639, then at Boston in 1674, at Philadelphia in 1683, and at New York in 1693. Now, there is scarcely a town or large place in which there is not a printing machine, but chiefly for newspapers, school-books, and religious tracts, whilst in the larger towns the counterfeiting of English works forms the greater part of the publisher's business.

In the year 1835 there appeared the following number of works in the United States of North America, which moreover does not include many religious tracts, school-books, pamphlets, and new editions.†—

* See "Bibliopolisches Jahrbuch," for 1840, Leipsic. Weber, p. 40.

† See "Leipsiger Boersenblatt," 1 Dec. 1836.

	Original Works.	Counterfeits.
On Theology	70	35
Jurisprudence and Politics	20	6
History, Geography, Statistics, and Travels	46	21
Biography	30	11
Medicine and Surgery	11	5
Education	75	15
Juvenile Works, &c.	39	17
Novels and Romances	64	33
Arts and Belles Lettres	42	20
Miscellaneous.	34	10
Total	<u>431</u>	<u>173</u>

English literature is almost as widely spread in North America as in England, and the inhabitants of both countries may still be considered in that respect as one and the same people, speaking the same language, with the exception of the German and French part of the population. The Americans also have their trade sales in the larger towns (New York, Philadelphia, Boston, &c.) the same as in England.

The chief publishers are in these three towns and at Hartford.

The presses are principally occupied with the printing of newspapers, which are more numerous in the United States than in any other country. In 1839, the number of newspapers amounted to about 1,200, of which the state of New York alone possessed 253, and the town of New York, 56.

In Middle America the town of Mexico, and in South America the town of Rio Janeiro, are the chief places for literary-mercantile intercourse.

THE BOOK TRADE OF ENGLAND.

Less information exists upon the book trade of England than might be expected, when it is considered that all publications appearing in Great Britain must, by Act of Parliament, be registered at Stationers' Hall, and that copies of them must be sent within a short time after their appearance to the British Museum and certain other libraries. In England, too, as in France, the metropolis is the central point of the trade. Almost all the country booksellers, as well as those of Scotland and Ireland, have their trade agents in London, who furnish them with the works they require at monthly or even shorter periods. On the other hand, the London publishers have their agents at all the principal provincial towns; the two Universities publish little except classical or sacred works, chiefly reprints; so that in every respect London stands at the head of the whole English book trade; and the system of centralization which exists in Germany, and has afforded the means of furnishing so detailed an account of the book trade of that country, exists in a great measure in England. Little, however, is known upon the subject. The first number of the "Printing Machine, or Companion to the Library," published by Charles Knight, which appeared on the 15th February, 1834, contains some very interesting details, which prove that the materials for a more elaborate account exist, and would well repay the labour of an examination. The following statements are chiefly taken in abstract from this source.

The author divides the progress of printing, or publication, into five periods.

1. From 1471 (the introduction of printing by Caxton) to the accession of James I. in 1603.
2. From 1603 to the Revolution in 1688.
3. From 1688 to the accession of George III. in 1760.
4. From 1760 to 1800.
5. From 1800 to 1833.

Taken altogether, the activity of the press of England during the first period was very remarkable. Ames and Herbert have recorded the names of 350 printers in England and Scotland, or of foreign printers engaged in producing books for England, that flourished between 1471 and 1600. The same authors have recorded the titles of nearly 10,000 distinct works printed among us during the same period. Many of these works, however, were only single sheets; but, on the other hand, there are doubtless many not here registered. During this period, therefore, the average number of distinct works produced each year was 75. The editions probably were small—even the printers of the Bible were cautious; they did not see the number of readers upon which they were to rely for a sale. In 1540, Grafton printed but 500 copies of his complete edition of the Scriptures; and yet so great was the demand for the Bible, that there are still extant copies of 326 editions of the English Bible, or of parts of it, printed between 1526 and 1600.

The early part of the second period was very unfavourable to literature. The character of the times is strongly marked by the fact, that an Act was passed to the effect that only 20 printers should practise their art in the kingdom; and in 1666 it appears, by a petition to Parliament, that there were only 140 “working printers” in London. The first catalogue of new publications was compiled in this period. It gives an account of “all the books printed in England since the dreadful fire, 1666, to the end of Trinity Term, 1680,” and was continued yearly to 1685. A large proportion, amounting to nearly one-half, of the works mentioned in this catalogue were single sermons and tracts. The whole number of books printed during the 14 years, from 1666 to 1680, was 3,550; of which 947 related to divinity, 420 to law, and 153 to physic; 397 were school-books, and 253 treated of subjects of geography and navigation, including maps. The yearly average was 253; but, deducting the reprints, pamphlets, single sermons, and maps, it may be assumed that the yearly average of new books was considerably under 100. In a catalogue with prices, printed 22 years later, the ordinary cost of an octavo volume appears to have been 5s.

The third epoch is remarkable for the introduction of periodical literature; but the number of new books published in this period appears to have been small. A “complete catalogue of modern books, published from the beginning of the century to 1756,” from which all pamphlets and other tracts are excluded, enumerates 5,280 works, which exhibits on the average of the 57 years only 93 new works annually.

The increase of the next period is very marked. According to the “Modern Catalogue of Books,” there were published, from 1792 to the end of 1802, 4,096 new works, exclusive of pamphlets, and of reprints not altered in price. Deducting one-fifth for reprints, the average of the 11 years is 372 annually.

The last period is still more remarkable for the progress which it exhibits in the commerce of books. The number of new publications issued from 1800 to 1827, including reprints altered in size or price, but exclusive of pamphlets, was, according to the London Catalogue, which contains a description of their size, price, and publishers, 19,860. Deducting one-fifth for the reprints, there remain 15,888 new books published in 27 years; or, on an average, 588 in each year. Up to this time there is evidence, which shews that the sale of new books was but limited, and that publishers did not rely for demand upon a great body of purchasers. But, in 1827, "Constable's Miscellany" was first published, and the Society for the Diffusion of Useful Knowledge commenced its operations. The example was followed by many publishers of eminence. Series of great value, but at a cheap price, the cost of which could only be reimbursed by an extensive circulation, were brought out, and were alike successful and profitable, while they created a taste for information and a demand for a cheap supply, which soon called into existence the "Penny Magazine" and its numerous followers. The effects of this rapid progress upon the book trade will be seen in the following table, which exhibits the number of new publications, exclusive of pamphlets or reprints, together with the number of volumes, the aggregate price of a single copy of each new work, the price of 500 copies, which may be considered an average edition, and the average price per volume, from 1828 to 1833:—

	Publications.	Volumes.	Price.			Price of	Price		
			£.	s.	d.	500 Copies.	£.	s.	d.
1828	842	1,105	668	10	0	334,250	12	1	
1829	1,064	1,413	879	1	0	439,525	12	5	
1830	1,142	1,592	873	5	3	416,570	11	0	
1831	1,105	1,619	939	9	3	469,740	11	7	
1832	1,152	1,525	807	19	6	403,987	10	7	
1833	1,180	1,567	831	8	0	415,300	10	7	

The number in each subsequent year has been—

In 1834	1,212
1835	1,243
1836	1,250
1837	1,380*

And in 1838 3,376, including pamphlets, periodicals, and new editions.†

The following estimate of the total Literary Returns of the United Kingdom in 1833, is furnished in the article above quoted:—

	Per Annum.
1,180 new books, averaging 500 of each sold . . .	£415,300
School-books and reprints, at least	200,000
21 weekly periodical works, sold by respectable book-sellers, and included in the lists of the large wholesale houses (aggregate sale 300,000)	100,000
21 ditto, made up in monthly parts (aggregate sale 300,000)	100,000
12 libraries, galleries of portraits, and illustrated works, published monthly (aggregate sale 60,000) . . .	150,600
208 Magazines, and other monthly periodicals . . .	150,000
25 quarterly periodicals	75,000
10 annuals	30,000

* See Bent's Literary Advertiser.

† Publishers' Circular.

Almanacs	£ 50,000
Newspapers (30 millions, English)	1,000,000
Engravings and music	100,000
Scotch and Irish publications	50,000
Total	<u>£ 2,420,900</u>

If this estimate were tolerably correct for the year 1833—and it appears to be by no means exaggerated,—how much greater the amount of literary productions in the kingdom must be at the present time. The sale of newspapers alone had increased in England to 50 millions, for which 650,000*l.* must be added to the total amount. The duty on paper alone amounted, in 1839, to 610,273*l.*

The chief London publishers are in the habit of disposing of their new publications in large quantities at one time, by public sales, to the trade. Hence these are called “Trade Sales,” and only booksellers are admitted to them. Before the business commences, a sumptuous dinner is given, at the cost of the vendor, to the persons invited, *i. e.*, to those who have received the catalogue. At the trade sale of Mr. Murray, on 2nd March, 1836, the amount of his publications reached 15,000*l.* The usual discount allowed by English publishers to the trade is from 25 to 30 per cent. on octavo volumes, and from 20 to 25 per cent. on quarto volumes, at 7 to 12 months’ credit, or 5 per cent. for cash. To avoid the underselling and depreciation of new books, a meeting was held in London, in December, 1829, at which 650 London booksellers agreed that no book printed within two years should be sold at less than 10 per cent. below the shop price, with the exception of works sold by the publisher himself at a trade sale. The rights of authors and publishers are protected by special laws, an alteration of which has been agitated in Parliament for the last two or three years.

The Customs’ duty on foreign books was formerly very heavy, being 5*l.* per cwt. on those unbound, and 6*l.* 10*s.* on those bound. It has since been modified, and at present stands as follows:—

	Per Cwt.
1. Upon editions printed prior to the year 1801.	£1 0
2. „ „ in or since the year 1801	5 0
3. „ „ in the foreign living languages, or printed in the British Possessions in the English language	2 10

The quantity of each of these three classes upon which duty was paid, in 1839, was, No. 1, 819 cwts.; No. 2, 410 cwts.; No. 3, 2,124 cwts.: total, 3,353 cwts. The total amount of duty received was 8,260*l.*

The quantities and value of British books exported has been, during the last ten years, as follows:—

	Quantities. Cwts.	Value. £.		Quantities. Cwts.	Value. £.
1830	4,025	95,874	1835	6,990	148,318
1831	4,112	101,110	1836	8,257	178,945
1832	4,115	93,038	1837	7,120	147,772
1833	5,399	124,535	1838	7,061	143,996
1834	5,354	122,595	1839	7,752	155,715

The average value of one cwt. appears, therefore, to be about 20*l.*

The principal part of these quantities is sent to the British colonies and the United States. In 1839 the exports were thus distributed:—

	Cwts.
To the United States	1,712
„ British Colonies in America and West Indies	1,621
„ East India Company's Territories and Ceylon	1,469
„ British Settlements in Australasia	694
„ Cape of Good Hope	228
„ Europe	1,694
„ All other Countries	334
Total	<u>7,752</u>

APPENDIX.

The following is a list of the German periodical Papers, Journals, and Reviews, relating to the German Book-Trade.

1. Leipziger Börsenblatt für den deutschen Buchhandel, (since 1834.) Leipzig, bei Froberg. Price 3 doll. 8 gr. per annum.

2. Organ des deutschen Buchhandels, (since 1834.) Berlin, bei Starkebrandt. Price 4 doll. per annum.

3. Allgemeine Presszeitung oder Blätter für Gesetzgebung, literarischen Verkehr und Bücherkunde, von Dr. J. E. Hitzig, 1840. Leipzig, bei Weber. Price 4 doll. per annum.

4. Leipziger Allgemeine Zeitung für Buchhandel und Bücherkunde, (since 1838.) Leipzig, bei Weber. Price 4 doll. per annum.

5. Süddeutsche Buchhändler Zeitung, (since 1838.) Stuttgart, bei Hoffmann. Price 2½ doll. per annum.

6. Bibliopolisches Jahrbuch, (since 1837.) Leipzig, bei Weber. Price 2 doll. per annum.*

7. Wochenblatt für Kunst und Musikalienhändler, (since 1837.) Leipzig, bei Schubert (now in Grimma). Price 2 doll. per annum.

8. Buchhändler Wochenblatt, (from 1821 to 1836, now ceased), Cassel, bei Krieger. Price 4 doll. per annum.

9. Buchhändler Zeitung, (1778 to 1785, now ceased.) Hamburg.

10. Bibliopolische Karte von Deutschland, Leipzig, bei Weber. Contained in the Bibliopolisches Jahrbuch for 1836, (see No. 6), but also to be had separately. In this map are inserted only the towns in which booksellers or printers live.

11. Verzeichniss der Kunst und Musikalien Handlungen Deutschlands, und der benachbarten Staaten, für 1838, 4to. Leipzig, bei Schubert. Price 6 groschen.

12. Monatliches Verzeichniss der in Deutschland neu erschienenen Kunstsachen so wie der in dieses Fach einschlagenden Gegenständen des Buch- und Landkartenhandels, 8ter Jahrgang, 1839. Berlin, bei Gropius. Price 16 groschen.

The correct title of the Bücher Lexicon, by Heinsius, referred to at p. 170, is as follows:—Allgemeines deutsches Bücher Lexicon oder vollständiges alphabetisches Verzeichniss derjenigen Schriften, welche in Deutschland und in den angrenzenden, mit deutscher Sprache und Literatur verwandten Ländern gedruckt worden sind, (neulich aller von 1700 bis zu Ende 1834 erschienenen Bücher) mit ausführlichen Angaben der Verleger, Druckorte, Preise, Auflagen, Jahrgängen, Formata, Bogenzahlen, Artistischen, Beilagen und vielen Buchhänd. und literarischen Nachweisungen, &c. Herausgegeben von Heinsius, 1er bis 4er Band, 5er und 6er Band von Kaiser, und 7er und 8er Band von Schulz. The 8th volume has been published by Brockhaus of Leipzig, and bears also the title of “4er Supplement Band zur 2ten Ausgabe des Heinsius'schen Bücher Catalogs,” containing all the works published from 1828 to 1831, edited by Otto Augustus Schulz. The first volumes are sold at the reduced price of 20 dollars.

Another similar work is the “Allgemeines Bibliographisches Lexicon, von Fr. A. Ebert,” 8vo., Leipzig, 1821-30. Price 10 dollars.

* The number of this work for 1838 contains a list of all the Polytechnic schools (19) in Germany; of the military schools (25); forest academies (29); or seminaries for schoolmasters (104). The number for 1839 contains a list of all the German newspapers and periodicals, arranged according to the nature of their contents.

PROCEEDINGS OF THE STATISTICAL SOCIETY OF LONDON.

First Ordinary Meeting, 1840-41, Monday, 16th November, 1840.

Lieut.-Colonel SYKES, V.P. in the Chair.

The following gentlemen were proposed as candidates for admission :—

The Rev. T. Arnold, D.D.	John Leadbetter, Esq.
Sir Francis Mackenzie, Bart.	W. P. Alison, Esq. M.D.
Rev. Joseph Ballantine Dykes.	Henry John Porter, Esq.
Dr. Cowan, of Reading.	Professor W. Ramsay.
Ross Hassard, Esq.	General Sir George Cockburn.
George Smith Brent, Esq.	James Ranald Martin, Esq. M.D.
William Ley, Esq.	Neil Malcolm, Esq.

The following gentlemen were elected :—

Isaac Weld, Esq.	Robert Castle Jenkins, Esq.
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A paper was read “On the Mortality among the Poor in the City of Limerick,” by Daniel Griffin, Esq., M.D. (*see* p. 305.)*Second Ordinary Meeting, Monday, 21st December, 1840.*

Lieut.-Colonel SYKES, V.P. in the Chair.

The following gentlemen were proposed as candidates for admission :—

Thomas Headlam, Esq.	Mr. P. L. Simmonds, Chichester.
Richard Griffith, Esq.	John Conolly, Esq., M.D.
William Otley, Esq., M.A.	Matthew Truman, Esq., M.D.
Thomas Southwood Smith, Esq., M.D.	

The following gentlemen were elected :—

The Rev. T. Arnold, D.D.	John Leadbetter, Esq.
Sir Francis Mackenzie, Bart.	W. P. Alison, Esq. M.D.
Rev. Joseph Ballantine Dykes.	Henry John Porter, Esq.
Dr. Cowan, of Reading.	Professor W. Ramsay.
Ross Hassard, Esq.	General Sir George Cockburn.
George Smith Brent, Esq.	James Ranald Martin, Esq. M.D.
William Ley, Esq.	Neil Malcolm, Esq.

It was announced that the Council recommend to the Society, as Foreign Honorary Members, to be balloted for at the next meeting :—

Professor Fallati, of Tübingen.	Dr. Holst, of Christiania.
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The Chairman announced that the Council had determined on making a collection of specimens of British and foreign newspapers, and the co-operation of the Fellows was requested for this object.

A paper was read, entitled, “An Enquiry into the Condition of Criminal Offenders in England and Wales with respect to Education,” by Rawson W. Rawson, Esq. (*see* p. 331.)*A List of Statistical Papers printed by the Houses of Parliament, during the Session 1840.*

HOUSE OF LORDS.

Nos.

- 13 Income, Expenditure, and Debt—Of the United Kingdom, 1835-39.
- 22 Poor Laws—General Order of Commissioners—Out-door Relief.
- 28 Life Annuities—Amount granted and Stock surrendered, 1835-39.
- 29 Supply of Water to the Metropolis—Report of Select Committee.
- 33 Court of Exchequer—Bills filed, Motions heard, 1836-40.
- 34 Court of Chancery—Ditto.

Nos.

- 35 Bonding Ports—In United Kingdom, with Nature of Limitations.
- 44 Navy—Seamen, Distribution, and Complements of Ships, 1839; Experimental Squadrons, Ships launched, 1835-40.
- 45 and 145 Court of Chancery—Motions heard, 1830-34.
- 59 Court of Chancery—Appeals from Decisions in, 1830-34.
- 66 Appeals, House of Lords—from Courts of Chancery and Exchequer, 1836-39.
- 73 Royal Marines—Number employed on Shore, March 1840.
- 75 Rum—Quantities Imported, Paid Duty, Exported, &c., 1833-39.
- 79 Opium Trade, India—Quantities sold and Profit, 1820-38.
- 82 Coaches—Number, not Mails, free from Turnpike Tolls.
- 84 West Indies—Papers, Jamaica, Part 4; Windward Islands, Part 2.
- 95 Wheat—Average Monthly Prices, 1828-40.
- 105 Peerages of Ireland—Extinct and created, 1800-40.
- 108 Fire-Arms, Ireland—Persons registered as owners of, 1837-40.
- 110 Grain—Quantities Imported from Ireland, 1839.
- 111 Wheat—Quantities Imported into Scotland, 1820-39.
- 112 Grain—Quantities Imported from Ireland, 1820-39.
- 115 Ditto—Quantities Imported into Great Britain monthly, 1839.
- 116 Bank of England—Alterations in Rate of Discount, 1837-40.
- 117 Small-Pox—Deaths in England and Wales, in each Quarter, 1839.
- 120 Corporation of Dublin—Evidence before Commissioners of Enquiry, 1833.
- 125 Wheat—Average Prices and Imports into England, Dantzic, &c. 1815-39.
- 126 Wheat and Sheep's Wool—Quantities Imported from each Country, 1839.
- 135 Savings' Banks—Number and Value of Deposits, 1838-39.
- 136 Wheat—Quantities Imported at each Rate of Duty since 1828.
- 140 Outrages, Ireland—Rewards offered by Lord-Lieutenant, 1837-40.
- 264 Ditto ditto by other public Officers, 1837-40.
- 277 Ditto Number Committed in each Month, 1839.
- 157 Friendly Societies—Number and Value of Deposits, 1838-39.
- 164 Wheat, Scotland—Fiar Prices in each County, 1828-39.
- 174 Grain, Jersey—Average Prices, Imports and Exports, 1820-39.
- 192 Ditto, Guernsey—Ditto ditto.
- 206 Chimney-Sweepers and Chimneys—Report of Select Committee.
- 230 Disease in Scotland—Instructions to Poor-Law Commissioners for Enquiry.
- 266 New South Wales—Charges for Police Establishments, &c.
- 293 Appeals, House of Lords—Judgments given in 1840.
- 294 Debtors, Middlesex—Number in Prison, and time in custody.

The above List does not include Papers likewise printed by the House of Commons.

HOUSE OF COMMONS.

Nos.

Session 1839.

- 402 Municipal Corporations—Analytical Index to Reports.
 - 562 Local Taxation—Amount expended in each County for Poor, County, Highways, and Church Rates, 1748 to 1839.
 - 569 Hop Grounds—Extent and Produce in England, 1829-35.
- Session 1840.
- 5 Wheat—Quantities returned to Inspector of Corn Returns, and Annual Average Prices, 1828-38.
 - 8 Law Commission, Scotland—Proceedings, &c.
 - 9 War in Afghanistan—Papers relating to.
 - 10 Post-office and Postage—Indexes to Reports, 1735-1839.
 - 15 Newspaper Stamps—Number issued to each Newspaper, July to Sept. 1839.
 - 266 Ditto ditto Jan. to March 1840.
 - 525 Ditto ditto April to June 1840.
 - 17 Postage—Treasury Warrants regulating New Duties.
 - 18 Education—Minutes of Committee of Council; Grants made.
 - 21 Monies in the Exchequer—Amount on 27th January 1840.
 - 22 Bank of England—Transactions with Government, 1839.
 - 23 Ecclesiastical Commission—Orders in Council confirming Recommendations.
 - 25 Northern Lighthouses—Receipts and Payments, 1838

Nos.

- 26 Royal Family—Sums paid to each Member, 1835-40.
- 27 Public Income and Expenditure—Balance Sheet, 1839.
- 28, 430, 434, 491 Estimates, Army—1840-41.
- 30 Navy—Receipt and Expenditure, 1839.
- 31, 434, 435 Estimates, Navy—1840-41.
- 35 Colonial Land Board—Commission of Appointment, &c.
- 38 Queen Anne's Bounty—Receipts and Disbursements, 1838.
- 39 Court of Session, Scotland—Sittings, May to July 1839.
- 40 Mint—Returns of Coinage, &c, 1839.
- 41 Grand Jury Presentments, Ireland—Amount in each County, 1839.
- 42 Committals, Ireland—Number of Persons committed for Offences, 1839.
- 43 Hand-Loom Weavers—Reports of Assistant-Commissioners. Parts 2 to 5.
- 45 Registrar of Designs—Designs registered and Fees.
- 50, 92, 299, 437, 474 Railway Communication—Reports of Select Committee.
- 53, 175, 271, 310, 408, 609 Tithe Commutation—Notices and Agreements, &c. to February 1840.
- 54 Court of Session, Scotland—Causes enrolled and heard, 1839.
- 57 Niger Expedition—Proposition of Colonial Office.
- 58 Mauritius—Papers respecting Free Labour in.
- 59 Infirmaries, Ireland—Income, Expenditure, Patients, &c, 1835-37.
- 62 Expired and expiring Laws—Report of Committee.
- 63 Harris's Lightning Conductors—Report of Commission.
- 64 Shannon Navigation—Report of Commissioners 1839.
- 65 Prince Leopold—Sums paid to, 1818-39.
- 66, 431, 493 Estimates, Ordnance—1840-41.
- 68 Tithe Commutation—Agreements confirmed, July to December 1839.
- 69 Metropolitan Police—Annual Accounts of Receipts and Expenditure, 1839.
- 70 Postage—Treasury Warrant respecting Parliamentary Proceedings.
- 71, 522 Navy—List of Mates.
- 73 Court of Chancery—Fees received by each Clerk and Master.
- 74, 489 Survey of Ireland—Progress made therein, and Value of Parishes.
- 75 British North American Colonies—Description of Ships arriving from, 1836-38.
- 77 British Guiana—Correspondence, Hill Coolies.
- 78 Court of Bankruptcy—Account of Fund and Salaries, 1839.
- 79 Merchant Seamen—Number registered.
- 80 Trade and Navigation—Annual Comparative Accounts, 1838-39.
- 81 Metropolitan Police—Number and Salaries, January 1840.
- 82 Trinidad—Order in Council, Immigration into.
- 83 Civil List Pensions—Granted since 1828.
- 84 Wheat—Imported, paid Duty, &c., Monthly, July to December 1839.
- 86 Duchies of Cornwall and Lancaster—Receipts and Expenditure, 1839.
- 87 Murderers and Executions—Effects of Commutations.
- 88 Newspapers—Number, Stamps, and Advertisements, 1836-39.
- 89 Wheat—Parcels sold weekly in certain Markets, 1838-39.
- 98 Schools of Design—Report of Mr. Dyce on Schools Abroad.
- 99 Navy—Average Number of Seamen employed, 1839.
- 101 British Museum—Income and Expenditure, &c., 1839.
- 108 Spain—Marines employed in, Stores supplied to.
- 109 Customs' Duty—Amount collected at each Port, 1838-39.
- 110 Education, Ireland—Applications from Synod of Ulster for Grants.
- 111 Ecclesiastical Commission, Ireland—Report, 1839.
- 112 Greenwich Hospital—Establishment, Receipts, and Expenditure, 1839.
- 113 Emigration—Report of Agent-General, &c.
- 116 Rural Constabulary Force—Counties in which adopted, Force, and Charge.
- 117 Governor-General of Canada—Expense of Outfit, &c.
- 120 Revising Barristers—Names and Fees, 1835-39.
- 121 Hops, Malt, and Brews—Growth, Produce, Consumption, Licenses, &c., 1839.
- 122 Excise Duties—Gross and Net Amount in each Collection, 1837-39.
- 123 Legacy Duties—Amount received, 1797-1839; Amount charged, 1839.
- 124 Education—Applications for Grants to Committee of Council.
- 125 Convicts—Reports of Superintendent, 1839.
- 126 Vaccine Establishment—Annual Report of Officers, 1839.

Nos.

- 127 Navy—Ships, 1797 and 1815 ; Prices of Provisions, 1836-40.
- 128 Post-office Steam-packets—Length of Passages to Ireland, &c., 1839.
- 129 Postage—Returns exhibiting effects of change in Duties.
- 132 Prosecutions, &c., Scotland—Expenses, 1835-38.
- 133 Registrar of Deeds, Middlesex—Fees, &c., 1825-39.
- 134 Penitentiary, Milbank—Annual Report, 1839.
- 135 Shrewsbury and Holyhead Road—Annual Report, 1839.
- 136 Assizes—Memorials for change of place of holding, and result.
- 137 India—Acts of Government, 1831-38.
- 140 Soap—Quantities made, Imports, Exports, Drawbacks, Convictions, 1839.
- 143 China Produce—Board of Trade. Transshipments at Hong-Kong.
- 145 King of Hanover—Sums received from this Country.
- 147 Canada—Re-Union of the Provinces. Correspondence.
- 148 Ditto—Clergy Reserves Act, and Governor's Despatch.
- 149 Public Income and Expenditure—Various Accounts, 1828-39 ; Estimate, 1840.
- 150, 156, 200 China—Papers, Opium Trade.
- 151 British Guiana—Immigration of Labourers, Papers.
- 155 Letters Patent—Claims for renewal heard by Privy Council.
- 157 China Trade—Value of Exports from United Kingdom, 1828-39.
- 158 Glass—Duty on Drawback, 1839.
- 159 Health of the Navy—Statistical Reports thereupon.
- 160 Public Debt—Additions made since 1830.
- 161 Prussia—Papers respecting Commercial Relations.
- 162 Fortress of Kelat—Papers relating to Capture.
- 164 Secret Service Money—Amount of Grants, 1831-39.
- 165 Finance Accounts—Annual Accounts for the year 1839.
- 166 Public Offices—Increase and Diminution of Salaries, 1839.
- 167 Ditto Superannuations, 1839.
- 168 Mendicancy, Ireland—Resolutions of Boards of Guardians.
- 169 Civil Contingencies—Expenditure, 1839 ; Estimate, 1840.
- 170 Gaol Returns—Annual Report from each Gaol, 1839.
- 171 Factories—Offences against Factory Act, 1839.
- 172 Highland Roads and Bridges—Report of Commissioners, 1839.
- 176 Hop Grounds—Parishes in which Tithe has been commuted.
- 177 Wheat—Highest and Lowest Prices in Foreign Countries.
- 178 Masters in Chancery—Business of each, 1838-39.
- 179, 434 Estimates, Miscellaneous—For England, 1840-41.
- 180 Ditto ditto Ireland, 1840-41.
- 181 Ditto ditto Scotland, 1840-41.
- 182 Ditto ditto Commissariat, 1840-41.
- 183 British Settlers, India—Number and Extent since 1834.
- 185 Tower of London—Visitors, Fees, Expenses, &c., in each Month, 1839.
- 186 Exchequer Bills—Amount Outstanding, 1840.
- 196 Post-office—Increase of Establishment since October 1839.
- 197 Australia—Vessels Cleared from London, &c., 1838-39.
- 198 Official Pensions—Granted since 1822.
- 199 Beer Houses—Number Licensed in District of Newport, Monmouth.
- 201 Postage—Amount paid by each Public Department, 1839-40.
- 202 East Indies and China—Imports and Exports, Trade, Duties, Cotton, &c.
- 203-27, 314-34, 419, 504 Factories—Reports of Select Committee.
- 205 Clergy Reserves, Canada, Parts 1 and 2 ; Correspondence, 1819-40.
- 206 Army, Half-Pay—Officers in Civil Service drawing Half-Pay.
- 207 Municipal Boroughs—Receipts and Expenditure, 1839.
- 208 Milbank Penitentiary—Letter respecting Health of Prisoners.
- 209 Coroners—Number, Inquests, Fees, Deputies, &c.
- 213 Public and Beer Houses—Rental of Houses in each Excise Collection.
- 215, 325 Rating of Stock in Trade—Circular Letter and Report of Poor Law Commissioners.
- 216 Post-office Packets—Number employed in the Mediterranean.
- 219 Upper Canada—Religious Bodies entitled to share of Clergy Reserves.
- 220 { Savings' Banks—Receipts, Payments, and Balance, 1817-39.
- { National Debt—Annunities granted, &c., 1839.

Nos.

- 221 Coals—Prices paid by Government at Ports, 1837-39.
- 222 Admiralty Court—Business and Emoluments of Judge, 1836-39.
- 223 South Australia—Emigration and Sale of Lands; Papers.
- 237 Commissions—Appointed by Act of Parliament since May 1838.
- 238 Jamaica—Quantities and Value of Imports, 1835-39.
- 239 Justiciary Court, Scotland—Offences Tried, and Sentences, &c., 1839.
- 240 Incumbents and Curates—Number and Income in each Diocese, 1838.
- 243 Australia—Papers respecting Advancement of Religion.
- 244 Canada, Upper—Correspondence; Churches of England and Scotland.
- 247 Canada—List of Persons charged with Treason, 1837-40.
- 248 Herring Fishery—Annual Report of Commissioners, 1839.
- 250 Railway Communication—Report of Commissioners, London and Dublin.
- 312 Ditto ditto, ditto.
- 253 Soap—Reports on Specific Gravity.
- 254, 490 Education—Minutes of Committee of Privy Council.
- 260 Common Law Courts—Actions, &c., 1829-39.
- 261 Quarter Sessions—Names, Salaries, and Business of Recorders, 1837-40.
- 262 Church Building Commission—Receipts, Expenditure, &c., 1837-40.
- 263 Merchant Seamen's Fund—Income and Expenditure, 1839.
- 264 Public Revenue—Receipts and Payments at the Exchequer, 1839-40.
- 265 Army—Commissaries' Accounts, 1838-39.
- 267 Fire Insurance—Duty paid by each Office; Farming Stock Insured, 1839.
- 268 { Exchequer Bills—Amount Outstanding; Rate of Interest, 1815-39.
- 268 { Prices of Consols—Purchases by National Debt Commissioners, 1815-39.
- 269 Wool and Woollens—Imports and Exports, 1839.
- 272 Lists of Electors—Expense of preparing, &c., and Receipts from Sale, 1827-38.
- 273 Lancaster Gaol—Regulations.
- 276 Coffee—Imports from the Cape of Good Hope, 1839-40.
- 277 Postage—Treasury Warrant for the Use of Stamps.
- 278 Machinery—Exports to each Country, 1830-39.
- 279 Metropolis Roads—Report of Commissioners, 1839.
- 280 Court of Session, Scotland—Appeals from Decisions, 1820-40.
- 282 Copper and Tin—Imports and Exports, 1839.
- 283 Coals, Cinders, and Culm—Ditto, 1838-39.
- 284 Lead and Lead Ore—Ditto, 1839.
- 285 Glasgow University—List of Professors having Substitutes.
- 288 British Guiana—Papers relating to Boundaries.
- 289 Turnpike Trusts—Receipts and Expenditure, 1838.
- 290 Constabulary Force, Ireland—Number and Expense in each County, &c., 1840.
- 291 County Surveyors, Ireland—Number and Payments to, 1834-39.
- 293 Public Income and Expenditure—During Years ended April 1836-40.
- 294 Newspaper Stamps—Number issued in each year, 1837-39.
- 296 Barilla—Quantities paid Duty; Amount thereof, 1834-40.
- 297 Stamps—Number issued at each Rate, 1835-39.
- 298 Lunatics—Receipts and Disbursements of Metropolitan Commission, 1838-39.
- 301 Lunatic Asyloms, Ireland—Patients, Expense, Officers, &c., of each, 1839.
- 305 Court of Session, Scotland—Causes Instituted and Decided, 1839-40.
- 308 Established Church—Payments out of Public Revenue, 1801-40.
- 309 Court of Chancery—Fees and Business of Clerk of the Affidavits, 1834-39.
- 311 Manchester Police—Expenses, Rates to be levied, &c.
- 313 { Sheriffs, &c., Scotland—Expenses, Salaries, &c., 1838-39.
- 313 { Criminal Prosecutions, Scotland—Expenses, 1839.
- 316 Fresh Fruit—Quantities Imported, 1839.
- 323 Children's Friend Society—Report on Transactions at Cape of Good Hope.
- 327 Public Works, Ireland—Report of Board, 1839.
- 328 Cotton, Woollen, and Silk Goods—Imported and paid Duty; Amount thereof, 1835-39.
- 329 Shipping, Imports and Exports—Trade with each Country, 1821-39.
- 330 Bolton Police—Receipts and Expenditure, &c., 1839-40.
- 331 Mauritius—Papers, Introduction of Indian Labourers.
- 332 Supreme Courts, Scotland—Report of Select Committee.
- 336 Public Bills, Scotland—Introduced into Parliament; Expense, 1835-38.

Nos.

- 337 Canada, Upper—Extent and Value of Clergy Reserves.
 342 Chester Gaol—Regulations.
 347 York Gaol—Ditto.
 352 Transportation of Convicts—Order in Council.
 353 East India Company—Report of Select Committee of Lords, 1840.
 354 Metropolis Water— Ditto ditto.
 355 Spirits—Quantities Distilled, paid Duty, Imported, &c., 1839.
 356 Window Duty—Receipts in twelve Towns contributing largest amount, 1837-38.
 357 Customs' Duty—Amount received at each Port, 1839.
 359 Trade with China—Report of Select Committee.
 362 Light Houses—Receipts and Expenditure, 1838.
 524 Ditto, Ireland— Ditto, 1839.
 363 County Constabulary—Expense of Establishment in Counties.
 364 Metropolitan Courts—Prisoners committed in each, 1839.
 365 County Treasurers' Fee Fund, Ireland—Amount received, 1839-40.
 366 London University—Emoluments of Examiners; Degrees granted, 1838-39.
 368 Harbours on South-east Coast—Report of Commissioners.
 372 Millbank Penitentiary—Number of Prisoners, &c., 1835-39.
 376 Court of Chancery—Fees of Sworn Clerks, &c., 1838-39.
 379 Freeman—Number in each Borough, 1836-39.
 380 Fisheries—Bounties paid in Scotland and Ireland, 1809-39.
 382 Schools, Scotland—Proceedings of Treasury for Establishment of.
 381 Health of Towns—Report of Select Committee.
 385 Poor Law Amendment Act—Names, &c., of Assistant Commissioners.
 387 Caledonian Canal—Report of Select Committee.
 577 Ditto—Report of Commissioners.
 394 Lunatics—Number and Cost in Metropolitan District, 1840.
 396 Population Bill—Evidence taken before Committee of 1830.
 397 Registry Court, Dublin—Sittings and Cases heard, 1838-39.
 398 Trade with France—Imports and Exports, 1814-39.
 399 Public Income and Expenditure—Account in detail, 1837-39.
 400 Mail Steam Packets—Receipts and Expenditure, 1839.
 410 Metropolis Improvement—Report, &c., of Select Committee.
 415 Municipal Corporations—Appeals of Officers for Compensation.
 416 Wine and Spirits—Imports, Exports, Consumption, Stocks, 1839.
 417 Shannon Navigation—Expenditure of Committee of Enquiry, 1835-39.
 421 East India Company—Home Accounts, 1839-40.
 614 Ditto—Territorial Accounts, 1835-36, 1837-38.
 425 Poor Laws—Rates, Expenditure, Workhouses, Debts, &c., of each Union; Expenses of Commission, &c., 1836-38.
 426 Fisherton, &c., Gaols—Regulations.
 427 Education, Ireland—Annual Report of Commissioners.
 428 Valuation, ditto—Area, Amount and Expense of Valuation, &c.
 429 West Indies and Mauritius—Produce Imported from, 1839.
 438 Gaols—Officers, Salaries, Prisoners, Expenditure, &c., 1839.
 439 Malt—Quantities paid Duty, 1810-40.
 440 Danish Claims—Report of Commissioners.
 441 Grain—Exports from Ireland, 1820-39.
 442 Copyright of Designs—Report of Select Committee.
 449 Letters Patent—Minute of Board of Trade.
 457 Record Commission—Expenses, &c., 1835-40.
 458 Protestant Dissenters—Payments out of Public Revenue, 1801-40.
 633 Ditto, Ireland—Ditto.
 459 Civil List Pensions—Granted 1839-40.
 464 Inland Warehousing—Report of Select Committee.
 465 Freeman of Cities and Boroughs—Ditto.
 470 Education—Expenditure of Money voted, 1839.
 472 Bonded Corn—Report of Select Committee.
 476 Army Prize Money—Amount unclaimed; disposal thereof, 1809-39.
 478 Militia Estimates—Report of Select Committee.
 483 Lower Canada—Report of Commissioners on Losses by Rebellion.

Nos.

- 484 Justices of the Peace—List of Clergymen acting, 1840.
- 488 Yeomanry—Corps, and expense thereof, 1839.
- 494 Sheriffs, Scotland—Appeals from Sheriffs Depute, 1833-39.
- 495 Malt and Paper—Duties repaid on damaged, 1828-39.
- 496 Sugar—Quantities Refined in bond, 1839-40.
- 500 Administration of Justice—Evidence before Committee of House of Lords.
- 501 Postage—Number of Letters delivered in four weeks, 1839-40.
- 502 Half Pay (Civil and Military)—Amount in each Department, 1838-39.
- 509 New South Wales—Correspondence; Sale of Lands; Fire-arms; Gaols, &c.
- 510 Crown Lands, Colonies—Sales in each, 1831-38.
- 511 New South Wales—Revenue from Crown Lands, &c., 1831-38.
- 527 East India Produce—Report of Select Committee.
- 536 Poor Law Amendment Act—Unions refusing to appoint Chaplains.
- 537 Iron, &c.—Imports and Exports, 1839.
- 538 French Claims—Treasury Minute respecting Balance.
- 542 British Museum—Names and Salaries, &c., of Officers.
- 543 Pauperism—Mr. Weale's Report on Birmingham and Aston.
- 545 Railway Bills—Number brought into Parliament since 1830.
- 549 Coroner for Middlesex—Report of Select Committee.
- 554 Thames Embankment—Ditto.
- 556 South Australia—Annual Report of Colonization Commissioners, 1839.
- 559 New South Wales—Despatch respecting Waste Lands.
- 561 { Post Horse Duties—Produce in each District, &c., 1838-39.
- 561 { Mileage and Composition Duties—On Railways and Stage Carriages, 1836-39.
- 563 Revenues and Taxes—Mode of transferring Money to London and Dublin.
- 564 French Claims in Canada—Payments under Conventions of 1815-19.
- 571 New South Wales—Papers; Public Education.
- 578 Ecclesiastical Duties, &c., Bill—Vacancies in Chapters not filled up.
- 579 Registered Electors—Number in each County and Borough, &c., 1839-40.
- 582 New Zealand—Report of Select Committee.
- 588 Admiralty Court—Fees.
- 589 Mersey Conservancy—Report of Messrs. Wilkins.
- 590 Wheat and Oats, Ireland—Prices.
- 592 Spirits—Quantities in Stock, May 1840.
- 596 Colonial Pensions—Existing in certain Colonies, 1837-39.
- 597 Holyhead and London Road—Report of Commissioners.
- 598 London University—Charter and Papers relating to.
- 600 Prisoners for Libel, &c.—In each Gaol, 1840.
- 601 Import Duties—Report of Select Committee.
- 602 Banks of Issue—Ditto.
- 608 Grain—In Bond and Paid Duty, 1838-40.
- 610 Incorporated Towns—Petitions for Charters; Justices appointed; Rates levied.
- 612 New South Wales—Papers respecting Immigration.
- 613 Colonial Land and Emigration Board—Papers, 1840.
- 615 Appeals to Privy Council—Number pending in 1837, since heard.
- 617 Merchant Seamen's Fund—Report of Select Committee.
- 618 Standing Orders—Adopted, August 1840.
- 620 Churches and Chapels—Number completed, 1831-39.
- 622 Slave Vessels—Number seized and tried, &c., 1839-40.
- 623 Spirits—Distilled in each Excise Collection, &c., 1825-39.
- 625, 626 Mails, West Indies, &c.—Report on fitness of Channel Reports.
- 627 East India—Papers; Poll Tax at Tinnevely.
- 628 Ditto—Ditto; Abolition of Pilgrim Tax.
- 629 Pauperism—Report on Agricultural and Manufacturing Districts.
- 630 Dean Forest Mines—Annual Report of Commissioners, 1839.
- 631 Woods and Forests—Ditto.
- 632 Colonies—Revenues and Expenditure, 1835.
- 635 County Treasurers, Ireland—Balances in hands of.
- 636 Royal Marines—Promotions, 1814-39.
- 637 Bank of Ireland—Circulation, &c., 1836-40.
- 639 Hand-Loom Weavers—Mr. Hickson's Report.
- 640 New Churches—Annual Report of Commissioners.

PRESENTED BY COMMAND OF HER MAJESTY.

- Canada—Correspondence upon Affairs of; 4 parts.
 China—Ditto: 7 parts.
 West Indies—Papers upon State of; Part 1, Jamaica.
 Revenue, Population, and Commerce, Part 8; and Supplement to Part 7, Colonies, 1836.
 Tithe Commission—Annual Report, 1839.
 Slave Trade—Negotiations with Portugal; Papers.
 Ditto—Treaty with Venezuela.
 Ditto—Papers presented by Foreign Office.
 King's Isler, Port of Mahon—Occupation by the French; Papers.
 Factories—Reports of Inspectors, 1839-40.
 Charities—Thirty-second Report of Commissioners; Part 6.
 Ditto—Index to Reports of Commissioners.
 Poor-Law Commission—Report and Appendices.
 Army—Statistics of Health and Sickness; Tulloch's Report.
 Prisons, England—Fifth Report of Inspectors; Parts 2, 3, and 4.
 Ditto, Scotland—First Report of General Board.
 Ditto, Ireland—Annual Report of Inspectors.
 Hand-Loom Weavers—Reports of Assistant-Commissioners: Parts 2 to 5.
 Dutch East Indies—Papers relating to execution of Treaty in 1824.
 Sumatra—Papers relating to Proceedings of Netherland Authorities.
 Roads in England—Report of Commissioners of Enquiry, with Appendix.
 Egypt and Candia—Dr. Bowring's Report.
 Syria—Ditto.
 Prussian Commercial Union—Ditto.
 Sicily—Mr. Macgregor's Report on Commercial Relations.
 Bankruptcy and Insolvency—Reports of Commissioners.
 Births, Deaths, and Marriages—Second Report of Registrar-General, with Appendix.
 Central Loan Fund, Ireland—Report of Board.
 Naval and Military Commission—Report.
 New Zealand—Correspondence.
 Law Commission, Scotland—Fourth Report.
 Criminal Law—Fifth Report of Commissioners.
 Criminal Offenders—Annual Returns for England and Wales, 1839.
 National Education, Ireland—Report of Commissioners, 1839.
 Turkey—Papers, Continuance of Monopolies.
 Parkhurst Prison—Reports of Officers.
 North American Boundary—Correspondence; Parts 1 and 2.

MISCELLANEOUS.

Resolution of the Committee of the Statistical Section of the British Association for the Advancement of Science, passed at Glasgow on Tuesday, 22nd September, 1840, (*see* p. 211.)

It was moved by Dr. Alison, and being seconded by Dr. Cowan, was put and resolved:—

“That it be represented to the General Committee, that in the course of the proceedings of this Section very serious impediments to the progress of Statistical Science have been manifested in the absence of proper means for the complete registration of births, deaths, and marriages in Scotland.

“That the progress of the department of Vital Statistics, subservient to the advancement of medical science, is arrested by the want of a proper system of registration of the causes of death, and of the extent of the prevalence of various diseases, as indicated by the extent and mortality from them, especially by the want of means of such a system of registration of the diseases or causes of death incident to particular occupations, and to particular localities, as that now in progress in England.

“ That the settlement of questions of title to property, and various civil purposes, are frequently embarrassed or frustrated by the want of the pre-appointed evidence of consanguinity derivable from a complete system of registration of births, deaths, and marriages, in Scotland.

“ That it be, therefore, recommended to the General Committee that means be taken to represent these defects to Government, with a view to obtain appropriate legislative provisions for their remedy.”

An Account of the Quantities of Foreign and Colonial Wheat and Wheat-Flour Imported, Paid Duty, and Remaining in Warehouse, in each of the Months ended 10th October, and 5th November and December, 1840.—
(Continued from p. 304.)

Months ended	Wheat.			Wheat-Flour.		
	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.	Imported.	Paid Duty.	Remaining in Warehouse at the end of the Month.
	Qrs.	Qrs.	Qrs.	Cwts.	Cwts.	Cwts.
10th Oct. . .	351,155	1,035,827	7,278	269,818	365,807	8,594
5th Nov. . .	27,555	9,407	22,930	71,552	28,466	37,359
5th Dec. . .	33,145	4,637	54,698	132,308	55,398	84,280

Quarterly Average of the Weekly Liabilities and Assets of the Bank of England, in the Quarters ended 13th October, 10th November, and 8th December, 1840, and in the corresponding Quarters of the preceding Year.—(Continued from p. 304.)

Quarters ended	LIABILITIES.			ASSETS.		
	Circulation.	Deposits.	Total.	Securities.	Bullion.	Total.
1839.	£.	£.	£.	£.	£.	£.
15th Oct. . .	17,612,000	6,734,000	24,346,000	24,939,000	2,525,000	27,464,000
12th Nov. . .	17,235,000	6,132,000	23,367,000	23,873,000	2,515,000	26,418,000
10th Dec. . .	16,732,000	5,952,000	22,684,000	22,764,000	2,887,000	25,651,000
1840.						
13th Oct. . .	17,231,000	6,762,000	23,993,000	22,782,000	4,145,000	26,927,000
10th Nov. . .	16,798,000	6,396,000	23,194,000	22,319,000	3,729,000	26,048,000
8th Dec. . .	16,446,000	6,337,000	22,783,000	22,078,000	3,511,000	25,589,000

Aggregate Amount of Notes circulated in England and Wales by Private Banks, and by Joint-Stock Banks and their Branches, respectively, in each of the Quarters ended 27th June, and 26th September, 1839-40.—
(Continued from p. 304.)

Quarters ended	1839			1840		
	Private Banks.	Joint Stock Banks.	Total.	Private Banks.	Joint Stock Banks.	Total.
	£.	£.	£.	£.	£.	£.
27th June . .	7,610,708	4,665,110	12,275,818	6,973,613	4,138,618	11,112,231
26th Sep. . .	6,917,657	4,167,313	11,084,970	6,350,801	3,630,285	9,981,086

An Abstract of the Net Produce of the Revenue of Great Britain, in each of the Years and Quarters ended 5th July, 1839 and 1840.

Description.	Years ended 5th July.			
	1839	1840	Increase.	Decrease.
	£.	£.	£.	£.
Customs	19,606,561	20,267,868	661,307	..
Excise	12,132,971	12,182,377	49,406	..
Stamps	6,560,275	6,674,624	114,349	..
Taxes	3,730,546	3,722,848	..	7,698
Post-Office	1,536,000	978,000	..	558,000
Crown Lands	185,000	162,500	..	22,500
Miscellaneous	94,629	77,751	..	16,878
Imprest and other Monies	486,962	413,211	..	73,751
Repayments of Advances.	716,488	717,686	1,198	..
Total Income . . .	45,049,432	45,196,865	826,260	678,827

Description.	Quarters ended 5th July.			
	1839	1840	Increase.	Decrease.
	£.	£.	£.	£.
Customs	4,871,333	5,137,934	266,601	..
Excise	2,570,311	2,711,951	141,640	..
Stamps	1,647,423	1,729,651	82,228	..
Taxes	1,639,372	1,647,808	8,436	..
Post-Office	369,000	100,000	..	269,000
Crown Lands	40,000	42,500	2,500	..
Miscellaneous	14,611	4,117	..	10,494
Imprest and other Monies	301,625	297,880	..	3,745
Repayment of Advances .	202,462	195,995	..	6,467
Total Income . . .	11,656,137	11,867,836	501,405	289,706

Total Decrease on the Year, £147,433 : Total Decrease on the Quarter, £211,699.

An Abstract of the Income and Charges of the Consolidated Fund, in each of the Quarters ended 5th July, 1839 and 1840.

INCOME.			CHARGE.		
Description.	Quarters ended 5th July.		Description.	Quarters ended 5th July.	
	1839	1840		1839	1840
	£.	£.		£.	£.
Customs	4,871,333	5,137,934	Permanent Debt . . .	8,100,271	8,181,089
Excise	2,589,298	2,731,839	Terminable Annuities .	738,262	733,796
Stamps	1,647,422	1,729,651	Interest on Exchequer Bills . . . }	15,162	18,329
Taxes	1,639,372	1,647,808	Sinking Fund . . . . .	..	..
Post-Office	369,000	100,000	Civil List	96,582	96,845
Crown Lands	40,000	42,500	Other Charges	573,392	560,420
Miscellaneous	14,611	4,117	Charge for Advances . .	172,400	111,050
Imprest and other Monies	301,625	297,880	Total Charge.	9,701,069	9,701,529
Repayments of Advances	202,462	195,995	The Surplus	2,124,054	2,186,255
Total.	11,675,123	11,887,784	Total.	11,825,123	11,887,784
Cash applied to pay off } Deficiency Bills . . }	150,000	..			

An Abstract of the Net Produce of the Revenue of Great Britain, in each of the Years and Quarters ended 10th October, 1839 and 1840.

Description.	Years ended 10th October.			
	1839	1840	Increase.	Decrease.
	£.	£.	£.	£.
Customs	19,915,296	20,152,739	237,443	..
Excise	12,152,171	11,985,467	..	166,704
Stamps	6,508,523	6,726,317	217,794	..
Taxes	3,713,784	3,744,372	30,588	..
Post-Office	1,533,000	694,000	..	839,000
Crown Lands	160,000	167,500	7,500	..
Miscellaneous	103,907	84,479	..	19,428
Imprest and other Monies	499,964	451,784	..	45,180
Repayments of Advances.	756,009	656,140	..	99,869
Total Income	45,342,654	44,665,798	493,325	1,170,181

Description.	Quarters ended 10th October.			
	1839	1840	Increase.	Decrease.
	£.	£.	£.	£.
Customs	5,778,006	5,662,877	..	115,129
Excise	4,113,159	3,916,249	..	196,910
Stamps	1,699,724	1,751,417	51,693	..
Taxes	311,283	332,807	21,524	..
Post-Office	407,000	123,000	..	284,000
Crown Lands	40,000	45,000	5,000	..
Miscellaneous	17,654	24,382	6,728	..
Imprest and other Monies	41,426	82,999	41,573	..
Repayments of Advances.	234,045	172,499	..	61,546
Total Income	12,642,297	12,111,230	126,518	657,585

Total Decrease on the Year, £676,856: Total Decrease on the Quarter, £531,067

An Abstract of the Income and Charges of the Consolidated Fund, in each of the Quarters ended 10th October, 1839 and 1840.

INCOME.			CHARGE.		
Description.	Quarters ended 10th October.		Description.	Quarters ended 10th October.	
	1839	1840		1839	1840
	£.	£.		£.	£.
Customs	1,484,752	4,562,048	Permanent Debt . . .	3,409,271	3,404,448
Excise	4,133,334	3,935,987	Terminable Annuities .	1,409,975	1,377,177
Stamps	1,699,724	1,751,417	Interest on Exche- } quer Bills }	27,794	31,657
Taxes	311,283	332,807	Sinking Fund . . . . .	..	..
Post-Office	407,000	123,000	Civil List	96,570	97,024
Crown Lands	40,000	45,000	Other Charges	332,291	351,652
Miscellaneous	17,654	24,383	Charge for Advances . .	230,761	70,000
Imprest and other Monies	41,426	82,999			
Repayments of Advances	234,045	172,498			
Total	11,369,218	11,030,139	Total Charge	5,906,662	5,334,958
Cash applied to pay off } Deficiency Bills . . }	230,000	150,000	The Surplus	6,092,556	5,845,181
Total Income	11,599,218	11,180,139	Total	11,599,218	11,180,139

Average Prices of Corn per Imperial Quarter, in England and Wales, with the Rate of Duty on Foreign Wheat, during each week from 26th June to 25th December 1840; also of each Month, of the Quarters ended Midsummer, Michaelmas, and Christmas, and of the Year, 1840.—(Continued from p. 206.)

DATE.	WHEAT.			WEEKLY AVERAGE.									
	Weekly Average.	Aggregate Average.	Duty on Foreign.	Barley.		Oats.		Rye.		Beans.		Peas.	
Weeks ended:—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
June 26 . . .	67 8	67 7	18 8	35 5	27 11	37 3	45 3	45 6					
July 3 . . .	67 8	67 7	18 8	36 1	27 10	34 9	45 4	43 11					
10 . . .	68 6	67 8	18 8	34 8	28 5	35 3	45 8	44 10					
17 . . .	69 6	68 1	16 8	33 11	28 2	36 0	46 1	46 1					
24 . . .	71 4	68 8	16 8	32 8	28 10	36 8	45 11	45 6					
31 . . .	71 11	69 5	13 8	33 8	29 6	35 11	46 1	46 0					
Aug. 7 . . .	72 10	70 4	10 8	33 0	30 0	37 3	47 0	45 11					
14 . . .	72 4	71 1	6 8	32 4	30 5	40 0	46 11	44 8					
21 . . .	72 7	71 9	6 8	33 4	30 6	38 11	47 0	43 7					
28 . . .	72 4	72 3	2 8	34 11	30 7	39 5	47 5	45 4					
Sept. 4 . . .	68 11	71 10	6 8	34 8	30 6	38 6	47 3	44 5					
11 . . .	65 4	70 8	10 8	35 3	28 7	39 8	47 0	44 2					
18 . . .	64 2	69 3	13 8	36 8	25 10	39 8	45 6	42 6					
25 . . .	64 1	67 11	18 8	36 2	24 10	37 7	45 3	42 7					
Oct. 2 . . .	64 7	66 7	20 8	36 0	25 1	35 5	45 7	43 5					
9 . . .	64 0	65 2	21 8	36 5	23 9	35 9	44 2	42 10					
16 . . .	63 3	64 3	22 8	36 5	23 8	37 3	44 10	43 5					
23 . . .	62 5	63 9	23 8	36 1	23 1	36 11	43 6	43 3					
30 . . .	61 7	63 4	23 8	35 3	22 5	37 1	44 10	43 0					
Nov. 6 . . .	62 1	63 0	23 8	34 9	22 8	36 7	43 7	43 4					
13 . . .	62 2	62 7	24 8	31 8	22 0	35 8	44 0	42 0					
20 . . .	61 8	62 2	24 8	34 7	21 11	35 8	43 10	42 10					
27 . . .	60 0	61 8	25 8	33 6	22 2	34 10	43 0	43 7					
Dec. 4 . . .	58 10	60 9	26 8	32 0	21 11	34 4	41 4	40 1					
11 . . .	59 7	61 2	25 8	32 7	22 1	34 11	42 4	41 11					
18 . . .	59 1	60 3	26 8	31 6	21 4	32 10	41 1	40 5					
25 . . .	60 1	59 10	27 8	32 4	21 5	33 5	40 9	40 1					
Months:—													
June . . .	67 5	..	..	35 10	27 10	37 6	45 2	44 2					
July . . .	69 9	..	..	34 2	23 6	35 8	45 9	45 3					
August . . .	72 6	..	..	33 4	30 4	38 10	47 1	44 10					
September . . .	65 7	..	..	35 8	27 5	38 10	46 3	43 5					
October . . .	63 2	..	..	36 0	23 7	36 5	44 7	43 2					
November . . .	61 5	..	..	34 4	22 2	35 8	43 7	43 2					
December . . .	59 4	..	..	32 1	21 8	33 10	41 4	40 7					
Quarters ended:—													
Midsummer . . .	68 2	..	..	38 0	26 8	37 4	43 9	42 5					
Michaelmas . . .	69 4	..	..	34 4	28 9	37 7	46 4	44 6					
Christmas . . .	61 5	..	..	34 3	22 7	35 5	43 3	42 3					
Year 1840. . .	66 4	..	..	36 5	25 8	37 0	43 5	42 5					

An Analysis of Bankruptcies in England and Wales. shewing the Trades in which the same occurred, during each month from March to December, 1840, with the Total Number in each of the Years 1839 and 1840.—
(In continuation of account at Vol. iii. p. 112.)

TRADES.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total of the Year.	
											1840	1839
<i>Persons connected with Manufactures.</i>												
Cotton Trade .	7	4	2	2	1	1	2	3	..	1	38	51
Woollen do. .	3	2	4	5	5	5	2	3	3	2	46	26
Silk do. .	..	2	1	..	..	..	..	1	2	..	7	8
Linen do. .	4	..	4	..	2	..	1	..	..	1	14	4
Iron Foundry .	2	3	2	3	2	2	4	..	2	5	29	4
Iron Wares .	3	6	2	1	..	1	1	2	2	1	24	19
Building Trades	4	5	6	4	3	4	3	5	5	4	49	47
Miscellaneous .	9	10	10	13	13	8	14	7	9	14	129	64
<i>Agriculture.</i>												
Farmers. . .	1	1	1	..	..	1	..	..	..	..	4	5
Corn, Hay, and Hop Dealers, Mullers . . .	3	3	5	5	1	2	3	1	6	4	43	41
Cattle and Wool Dealers . . .	1	1	2	3	3	2	3	3	..	5	31	23
Coaches and Horses . . .	1	1	1	2	..	..	..	1	4	..	12	11
Brewers, Malt- sters, and Dis- tillers . . .	1	5	1	1	6	5	7	3	2	2	36	25
<i>Other.</i>												
Innkeepers and Victuallers. . .	13	9	6	9	6	8	4	6	2	19	106	114
Merchants, Bank- ers, Warehouse- men, Agents, Brokers, Ship- owners, and Wholesale Deal- ers	26	15	16	30	22	19	20	19	14	21	247	177
Tradesmen, Shop keepers, and Retail Dealers.	58	43	41	28	45	42	32	29	64	57	524	421
Miscellaneous .	12	9	7	7	6	4	4	6	7	8	86	43
Total in 1840 .	148	119	111	113	115	101	100	89	122	117	1,125	..
„ 1839 .	65	84	79	82	123	104	67	74	148	128	..	1,083

An Analysis of Bankruptcies in England and Wales, shewing the Counties in which the same occurred, during each Month from March to December, 1840, with the Total Number in each of the Years 1839 and 1840. (In continuation of account at Vol. iii, p. 112.)

COUNTIES.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total of the Year.	
											1840	1839
Bedford . . .	..	..	..	..	1	1	..	..	..	..	3	2
Berks . . .	3	..	1	..	..	2	1	..	1	1	10	11
Bucks . . .	1	1	..	..	..	1	..	..	1	..	5	4
Cambridge . . .	1	..	1	1	..	..	1	..	1	1	6	3
Chester . . .	3	6	3	3	2	2	4	..	..	2	28	28
Cornwall . . .	1	..	..	..	..	..	..	..	..	1	4	5
Cumberland . . .	1	..	..	..	..	..	1	..	..	1	3	4
Derby . . .	..	2	..	..	..	1	..	..	2	..	6	9
Devon . . .	2	1	1	2	5	2	4	..	2	2	27	29
Dorset . . .	..	1	..	..	..	..	..	..	1	..	3	8
Durham . . .	2	3	1	4	2	1	4	..	5	3	27	14
Essex . . .	2	..	2	..	1	..	..	..	2	..	5	6
Gloucester . . .	3	2	..	7	5	1	8	3	6	9	56	29
Hants . . .	1	1	3	1	3	1	..	..	1	2	16	18
Hereford . . .	1	..	2	..	3	1	..	..	..	2	11	8
Hertford . . .	..	..	1	..	..	..	..	..	1	..	2	5
Huntingdon . . .	..	..	..	..	..	..	..	..	..	..	..	1
Kent . . .	4	..	1	1	1	1	3	3	3	4	24	23
Lancaster . . .	36	23	18	29	19	22	19	18	12	18	261	246
Leicester . . .	1	1	1	..	1	1	3	..	2	..	14	6
Lincoln . . .	..	..	..	2	5	..	1	1	1	2	13	18
Middlesex . . .	26	20	28	24	17	17	14	11	36	37	277	259
Monmouth . . .	3	3	1	2	..	2	1	..	1	..	16	5
Norfolk . . .	1	1	1	..	..	..	..	2	..	3	13	15
Northampton . . .	1	..	..	..	1	3	..	2	..	1	12	4
Northumberland . . .	2	2	1	..	1	..	..	4	2	1	20	12
Nottingham . . .	3	4	2	1	..	..	..	1	..	2	17	8
Oxford . . .	1	1	..	1	..	2	2	1	..	3	15	5
Rutland . . .	..	..	..	..	..	..	..	..	..	..	..	..
Salop . . .	1	1	..	..	2	1	..	..	..	1	7	7
Somerset . . .	3	3	1	2	3	2	2	3	3	1	30	19
Stafford . . .	4	7	5	2	4	6	6	4	5	7	56	26
Suffolk . . .	1	1	2	2	..	2	1	1	1	1	15	7
Surrey . . .	5	4	3	1	5	1	5	8	7	3	56	46
Sussex . . .	..	..	..	1	1	1	..	1	3	..	9	20
Warwick . . .	8	12	7	5	9	7	8	6	9	5	93	57
Westmoreland . . .	..	..	..	..	..	..	..	..	..	..	..	1
Wilts . . .	1	1	1	1	1	2	1	1	..	..	9	5
Worcester . . .	..	1	3	1	..	..	..	1	2	1	10	4
York . . .	22	13	18	16	19	15	10	14	11	23	194	89
Wales . . .	4	4	3	4	4	6	2	3	2	10	52	17
Total in 1840 . . .	148	119	111	113	115	104	100	89	122	147	1,425	..
1839 . . .	65	84	79	82	123	104	67	74	148	128	..	1,083

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